Research Repository UCD

Title	Healthcare Assistants and Qualified Carers, A Trained, but Untapped Underutilised Resource: A population-based study in Ireland of skillset, career satisfaction, wellbeing and change across all sectors and care settings
Authors(s)	Conyard, Karl F.; Codd, Mary; Metcalfe, Allison; Corish, Siobhán; Flannery, Jackie; Hannon, Paul; Rusk, Brian; Yeates, Simon
Publication date	2020-03
Publisher	UCD CSTAR & HCA & Carers Ireland
Link to online version	http://hdl.handle.net/10147/627406
Item record/more information	http://hdl.handle.net/10197/11457
Publisher's version (DOI)	10.13140/RG.2.2.20322.68805

Healthcare Assistants and Qualified Carers,

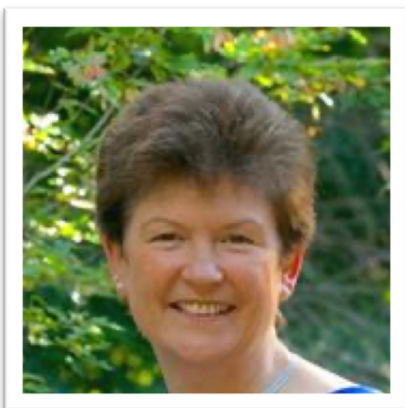# A Trained, but untapped underutilised resource

A population-based study in Ireland of skillset, career satisfaction, wellbeing and change across all sectors and care settings

Full Report

March 2020

Caring

for

Those Who Care

Foreword

Caring for those most in need, typically the young, the old, the frail and the infirm, is an essential part of life. How well we do that within our homes, our communities and our healthcare environments is a reflection of the importance we place on this sector of care in our society. It is a reflection of our society and our values. We have a long tradition of caring in Ireland, one which we should strive to continue and improve upon in this noisy, busy world.

In administering care to those in need, we must also be cognisant of the need to 'care for the carers'. This report is an important step in that direction for Ireland. Undertaken under the auspices of the Irish Healthcare Assistants and Carers Ireland Social Association, it set out to elicit the views of carers about their background, training, skillset, work environments and conditions, career satisfaction and aspirations. It is the first study of its kind in Ireland.

Those who conceived of, developed and implemented the study are to be congratulated for taking on such a huge and important task. Principal among them are Karl F Conyard, Allison Metcalfe, Paul Hannon, Brian Rusk, Simon Yeates, Siobhán Corish and Jackie Flannery.

The findings from this landmark study and report should go some way to supporting carers in Ireland, giving them a profile, providing them with opportunities for discussion and debate and advancing their cause towards better outcomes for all.

I am pleased to have been associated with this important work.

Mary B. Codd

Associate Dean of Public Health, University College Dublin

Executive Summary

This report addresses aspects of the function, wellbeing and satisfaction of healthcare assistants and qualified carers in Ireland. The study on which it is based was undertaken under the auspices of the Irish Healthcare Assistants and Carers Ireland Social Association. It set out to elicit the views of carers about their background, training, skillset, work environments and conditions, career satisfaction and aspirations and is based on responses from almost 2,000 healthcare assistants and carers. It is the first study of its kind in Ireland.

The report provides a historical perspectives on the evolution of the caring role in Ireland and internationally with the development of hospitals and healthcare. In parallel with this there have been changes in the perception of the role and those who carry it out, the training required and in the value placed on it by society. Education of nurses emerged primarily from the wartime experiences of the 19th and 20th centuries and has evolved into specialists areas over the ensuing time period in the last three decades healthcare assistants (HCAs) have become a distinct group and a career track in its own right. Formal training for HCAs and Carers in Ireland began in the 1990s with the Vocational Educational Committee's National Council for Vocational Awards (NCVA). With the training of this new group of health care workers, the grade of Health Care Assistant (including maternity HCAs) was introduced in 2001. These were incorporated as members of the healthcare team to assist and support the nursing, midwifery, medical and allied health teams.

Since 2001 a number of courses were created to allow those who wanted to become a HCA or Carers in a variety of fields to obtain the knowledge, skill and competences required to work in their chosen fields. These were later incorporated into the now familiar Further Education and Training Awards Council system (FETAC) and again incorporated into the current Quality & Qualifications Ireland system (QQI). In 2016 HCA and Carers Ireland (the Irish National Social Association for HCAs and Qualified Carers), was established. The Association provides support and additional education for members. The support group has provides direct information regarding carer and HCA welfare, rights and easy to understand information regarding qualifications, legislation and laws pertaining to the practice of care.

With changing demographic profiles in particular in developed countries, the issues of caring for older, infirm and end of life patients comes into sharp focus. Healthcare Assistants are a vital part of the healthcare team for patients and clients in a variety of healthcare settings. They provide predictability and stability of care, which in turn enhances feeling of security for our ageing, frail or chronically challenged groups. By now HCAs and Qualified carers are an established and an important part of the delivery of care in the Irish landscape of healthcare.

HCAs and qualified carers work in a number of care settings which include acute hospitals, nursing homes, home care, day care centres, hospices, intellectual disability services, mental health services and addiction services. Training programmes clearly need to address acquisition of relevant knowledge, skills and

competences in each of these areas. The extent to which respondents in this study have and use the knowledge, skills and competences acquired are outlined in detail in the report. Key findings include that skills acquired in training appear to be closely aligned with those needed in practice. Three quarters of respondents reported training in activities of daily living (ADL) and use of those skills in practice; almost half reported training in dementia care while 40% reported using those skills in practice; 20% reported both training and use in practice of skills relating to medication administration.

It is of note, however that 16% of respondents did not have a full formal qualification in caring. Of particular note is that there is no legal requirement for HCAs and Carers outside of the public sector to have full formal training. In this respect it would appear that in this respect Ireland may not differ greatly from other European countries where there is considerable variation in training requirements, in particular the need for practical training, in order to practice as a HCA. This calls for urgent attention to issues of standardisation and appropriate accreditation of education programmes and outcomes for this sector of care.

In terms of general satisfaction with their chosen career 11% of respondents reported with a high degree of satisfaction, while 87% of respondents reported an average level of satisfaction. With regard to intrinsic satisfaction (i.e. satisfaction with occupational condition), 6% reported a high degree of satisfaction while 91% reported average satisfaction. How this relates to job satisfaction in the general population, or in selected subgroup, using a similar instrument was outside the scope of this study. For extrinsic satisfaction (i.e. satisfaction with aspects management and respect accorded to the profession), a more evenly distributed of respondents was observed with 53% reporting high satisfaction and 43% reported average satisfaction. How these compare with individuals in similar occupations is not known at this time.

Responses to the General Wellbeing Schedule (GWS) demonstrated that more than half (54%) reported positive (41%) or low positive (13%) wellbeing; 13% reported marginal wellbeing while 31% appear to be experiencing significant stress or distress. How much of this relates to their occupation and working environment is not clear. Nonetheless these individuals may require help and support in relation to their important role as carers.

Work on defining core competences for carers at European level is comprehensively addressed in Core Competences of Healthcare Assistants in Europe [CC4HCA] (2016). This is an important blueprint for Ireland for the development of a set of core competences for HCAs and qualified carers in this country. The process of development of core competences has resource implications but the benefits of their development far outweigh the costs. This would lead naturally to the accreditation of programmes, regulation of the profession and registration of practitioners in question. The findings from this landmark study and report should go some way to supporting carers in Ireland, giving them a profile, providing them with opportunities for discussion and debate and advancing their cause towards better outcomes for all.

Contributors: Healthcare Assistant Research Consortium

Principal Investigator:	Mr. Karl F Conyard	University College Dublin, Centre for Support and Training in Analysis and Research (UCD CSTAR) and HCA and Carers Ireland (Advisory Committee)
Project Supervisor:	Prof. Mary Codd	UCD School of Public Health, Physiotherapy and Sports Science and UCD CSTAR (Director)
Project Co-Lead:	Ms. Allison Metcalfe	HCA and Carers Ireland (CEO)
Members:	Ms. Siobhán Corish	HCA and Carers Ireland (Research Team)
	Ms. Jackie Flannery	HCA and Carers Ireland (Research Team)
	Mr. Paul Hannon	HCA and Carers Ireland (Admin)
	Mr. Brian Rusk	HCA and Carers Ireland (Research Team)
	Mr. Simon Yeates	UCD CSTAR (Research Assistant)
Administrative Assistant:	Ms. Katayoun Bahramian	UCD CSTAR

Cite as:

Conyard KF, Metcalfe A, Corish S, Flannery J, Hannon P, Rusk B, Yeates S, Codd MB. (2020) Healthcare assistants and qualified carers, A Trained, but untapped underutilised resource: A population-based study in Ireland. Dublin : HCA and Carers Ireland & Centre for Support and Training in Analysis and Research, University College Dublin.

About the Contributors

Mr. Karl F Conyard – Study Principal Investigator
HCA, BSc. BHS, MPH, FRSPH
Karl originally trained as a Healthcare Assistant at Whitehall College of Further Education; following his time as a HCA Karl completed a BSc. in Health and Society at DCU. He then completed a Master of Public Health degree at UCD. Karl is also a fellow member of the Royal Society for Public Health (UK) and has been a public health advisor for HCA and Carers Ireland since 2018. He is also a research assistant for CSTAR (a recognised UCD Academic Centre for Support and Training in Analysis & Research) providing research management; data interpretation and statistical assistance under supervision of senior CSTAR Staff. Karl's research interests include disease epidemiology, cancer survival, biostatistics, teaching, healthcare provision, stress, infectious disease and care in all of its forms.

Prof. Mary Codd – Study Supervisor
MD, MPH, D.Stats, FFPHMI, PhD (Epi & Bios)
Mary Codd graduated in medicine from University College Dublin. Following residency in internal medicine at the Mater Misericordiae Hospital, Dublin, and Middlesex Hospital, London, she trained in Epidemiology and Biostatistics at the Mayo Clinic, Rochester, MN, and School of Public Health, University of Minnesota. Mary was appointed to UCD in 2008 and is Associate Professor of Epidemiology & Biostatistics at the School of Public Health, Physiotherapy & Sports Science. She teaches epidemiology, applied research methods and data management, biostatistics and computational methods at all levels from undergraduate through to post-doctoral students. She is Director of the UCD MPH programme. She is also Director of the consultative group, UCD CSTAR, a recognised UCD Academic Centre for Support and Training in Analysis & Research.

Ms. Allison Metcalfe – Study Co-Lead
Founder of HCA & Carers Ireland
Allison is the founder of Healthcare Assistants and Carers Ireland (HCA & Carers Ireland), a social media platform for HCAs and professional carers to provide support, educate and share experiences. From a health and social care background, Allison identified the need for such a forum. Having started the initiative in 2016, it has grown to almost 21,000 members and held its inaugural conference in November 2017, second one November 2018, supported by The HSE. Allison's work as a professional healthcare trainer and facilitator has enabled her to see, first hand, the challenges faced by carers. Allison is an advocate and is passionate about recognising, supporting and enhancing the role of the carer.

Ms. Siobhán Corish – Study Contributor
BSc.RNID
Siobhan graduated in Intellectual disability nursing from Dublin City University. Throughout her academic training Siobhán excelled within the areas of research practice and patient care. Siobhán has worked in a variety of specialities ranging from mental health and intellectual disability care settings from the public to the private sector. Siobhán's passion is in quality patient engagement practices, quality assurance of nurse practice and person-specific intellectual disability care. Her research interests include person centred practice, pharmacology specific to citizens with intellectual disability and mental health issues to carer responsibilities in community practice.

Ms. Jackie Flannery– Study Contributor

HCA, SNA, EMT, IILEx & CIPD HRM & Dip.Legal studies and Practice
Jackie Flannery has trained and worked in a variety of different areas from catering, health to the legal arena in an Irish context. She has worked as a legal secretary for fifteen years; then progressed into the area of special needs assistance which led her to healthcare provision. After CIPD Diploma in human resources. Jackie undertook a diploma in legal studies and practice at Griffith College, Dublin. Jackie is also a qualified Emergency Medical Technician (EMT). Her variety of educational attainment has meant that Jackie has a plethora of skills in which she has applied to the area of mental health, specifically rehabilitation and recovery. Jackie has recently finished additional training in mental health. Jackie's research interest include mental health, psychiatry and care provision.

Mr. Paul Hannon – Study Contributor
HCA & Dip.TTT
Paul has trained and worked in different areas from logistics and transport to healthcare. After Paul attained his healthcare qualification he has worked in a variety of areas including most notably geriatric care and community care. He completed the Level 6 Diploma in vocational training with distinction. Paul has been a member of the administration team within HCA and Carers Ireland group for the past three years and is involved in communication with qualified carers nationwide on a daily basis. He still involves himself in the role of carers in Ireland and is keen to have a role in effecting change for the qualified carer nationwide. Paul's research interests include healthcare management, healthcare training, healthcare provision, role of the carer and vocational health.

Mr. Brian Rusk – Study Contributor
HCA, EFR, O.A. Dip,
Brian trained in advanced cognitive behavioural therapy (O.A. Dip); voluntary first responder care and has many years of experience in geriatric care. Brian is the fourth generation of his family in the caring field with over a decade of experience in care of the older person. Brian is a team member of voices4care a new critical development working group within the All Ireland Institute of Hospice and Palliative Care (ALLHPC). He is a regular contributor to online social media platforms and an advocate of continuous professional development of all qualified HCA and Carers. Brian's research interests include palliative care, carer appreciation, care practice and provision.

Mr. Simon. P. Yeates – Study Contributor
BA (Hons), HDip & MPH
Simon completed his degree in psychology in 2013 followed by a Master of Public Health at UCD in 2019. Simon studied the attitudes to the smoking policy at St. Vincent's University Hospital as part of his MPH Dissertation. He now works as a smoking cessation officer helping people from disadvantaged areas in North County Dublin. He is also a research assistant for CSTAR

Acknowledgement

Table of Contents

Chapter Three
Study Methodology

Chapter Four
Results

List of Tables

List of Figures

Abbreviations

ANOVA	Analysis of Variance
BTEC	Business and Technology Education Council
CC4HCA	Core Competences of Healthcare Assistants in Europe
CCA	Continuing Care Assistant
Chi-sq	Pearson Chi-Square Test
CI	Confidence Interval
CNA	Certified Nursing Assistant
Comp.	Comparison
CPD	Continuous Professional Development
CRF	Case Report Form
CSTAR	Centre for Support and Training in Analysis and Research
DD	Data Dictionary
Df	Degree of Freedom
DoH	Department of Health
EC	European Commission
EFQ	European Qualification Framework
ENNK	Hungarian Health Registration and Training Centre
ESRI	The Economic and Social Research Institute
EU	European Union
FETAC	Further Education and Training Awards Council
GCSE	General Certificate of Secondary Education
GDPR	General Data Protection Regulation
GED	General Educational Development Test
GWB/GWBS	General Well-being Schedule
HCA	Healthcare Assistant
HIQA	Health Information and Quality Authority
HR	Human Resources
HSE	Health Service Executive
ISCO	International Standard Classification of Occupations
IV	Intravenous

LPN	Licenced Practical Nurse
MCSS	Minnesota Career Satisfaction Survey
MHCA	Maternity Healthcare Assistant
MTA	Multi-Task Attendant
NFQ	National Framework of Qualifications
NHI	Nursing Homes Ireland
NHS	National Health Service
NMBI	Nursing and Midwifery Board of Ireland
NVQ	National Vocational Qualification
QQI	Quality and Qualifications Ireland
RCSI	Royal College of Surgeons in Ireland
RGN	Registered General Nurse
SAMs	Safe Administration of Medications
TOEFL	Test of English as a Foreign Language
UCD	University College Dublin
VAD	Voluntary Aid Detachment
WHO	World Health Organization
WWI	First World War
WWII	Second World War

Chapter One

Introduction

"Tús maith leath na h-oibre

A good start is half the work"

-Irish Proverb

This document is a combined effort of the HCA & Carers Ireland, the national social association and collective support for Healthcare Assistants and Qualified Carers in Ireland, and UCD CSTAR, the Centre for Support and Training in Analysis and Research at University College Dublin, School of Public Health, Physiotherapy and Sports Science.

3
The Issue

This project came about because of a lack of published Irish-based research on general wellbeing, satisfaction and opinions of Irish Healthcare Assistants and Qualified Carers in a population-based context. Healthcare Assistants and Carers provide the majority of direct patient care and make up the largest group of employees working in health care facilities today. Healthcare Assistants are a vital part of the healthcare team for patients and clients in a variety of healthcare settings (HCA, 2019). Healthcare Assistants provide predictability and stability of care, which in turn enhances feeling of security for our ageing, frail or chronically challenged population (HCA, 2018).

Gap in Knowledge

Numerous issues relating to the provision of care for vulnerable groups have been noted throughout Ireland in both public and private sectors. They have been observed and reported in all care settings. However, there is little precise information upon which reporting has been based. Much of it is anecdotal, site and / or respondent-specific and cannot be generalised to an entire population of caregivers. Issues of particular concern are those relating to carer and career satisfaction, general carer well-being, carer skill-set, employee retention and changes needed. Although reported, media and policy makers have very little information with which to work. This has been noted in recent publications and reviews, most recently in a review of the role and function of Healthcare Assistants (DoH, 2018) working within the public sector which was carried out by the Health Service Executive service through the Department of Health. Issues identified are not representative of the entire population of Healthcare Assistants / Qualified Carers in Ireland. Thus, an objective study of carer satisfaction and well-being, skills, experience and aspirations is timely with a view to providing more objective and representative information on this group of healthcare workers.

Project Outline

The aim of this project was to provide a more representative account of factors relevant to the population of trained carers and healthcare assistants in Ireland than has existed heretofore, as a basis for more informed opinion and better regulation going forward.

This is the first quantitative population-based study of qualified carers in Ireland, using a multidisciplinary approach to observe skillset, career satisfaction, wellbeing and change in all sectors and settings of care.

This report also reviews the historical contexts of caring, up to date research and reasoning around the role at this time. The following areas have been included in the literature review (Chapter Two)

- Historical perspectives in Caring;
- National and international training, rules and core competences;
- Issues affecting healthcare workers nationally and internationally

Chapter Four presents the results of the study in a variety of formats which include descriptive statistics based on frequency, distribution; inferential statistics which include tests of association, difference, correlation and regression.

Chapter Five discusses the findings of the study. The discussion focuses on the generalisability of results, examines each focus area and interprets the findings in the context of the caring vocation.

Chapter Six presents recommendations based on the findings which should prove useful to policymakers, agencies and other researchers in this expanding and needed workforce of Healthcare Assistants and Qualified Carers across all healthcare sectors and settings in Ireland.

Study documents included as Appendices are:
- Research Plan
- Statement of ethical approval
- Study advertisement
- Participant information leaflet
- Literature search strategy
- Questionnaire / Case Report Form
- Data dictionary
- Additional Figures

This study was completed as a pro-bono project at the Centre for Support and Training in Analysis and Research at University College Dublin (UCD CSTAR) for HCA and Carers Ireland, the national social association for Healthcare Assistants and Qualified Carers in Ireland in respect of its altruistic work and continuous commitment to HCA and Carer education, support and health.

"Caring about the happiness of others, we find our own."

-Plato

Chapter Two

Literature Review

Chapter Two

Section I

Historical Perspectives
in Caring

"I am of certain convinced that the greatest heroes are those who do their duty in the daily grind of domestic affairs whilst the world whirls as a maddening dreidel."
— Florence Nightingale

The role of the carer (or Health Care Assistant) is changing. It is very different to the role in times past when most people in need of care were cared for in their own homes by family and unpaid carers.

In society caring is seen academically as both a function and a role, one may even say a natural function and a role that has been taken on by many people for generations. It was not regarded as a job in former times, but more of a kindness or a duty, as many people who cared were family members or friends and the care was provided in the environment of the home.

People underestimate the job of a carer to a large extent as they may well be unaware of the role of the carer. The following is a brief description of the role as seen by the Marie Curie foundation (2019).

"*A Carer is someone who's looking after a partner, friend or family member who's not able to manage by themselves. Each caring role is different. Becoming a carer can happen gradually or very suddenly. It can last for years or days. Caring can be challenging and it's not for everyone*"

The above most relates to the role and function of a family or casual carer, but the sentiment remains true for employed carers who have studied and trained to national standards, **becoming a carer can happen gradually or very suddenly** depending on which route of training the person in question takes, along with the important message that it can be **challenging and that it is not for everyone**.

The changes in the caring role through the ages are profiled in the following section. This include the perception of the role, those who carried out the caring role, the gender of the majority of the carers, the training regime and the title of the care assistant at the time. The role changes from the pre-1900 period, the 1900's to World War I and through the Crimean War and World War II are reviewed. Changes through 1950's to 1980s, the 1990s, to the noughties (2000-2012 and on to the present day) are reviewed. The changes in the role, along with what the role entails, legislation and changes made to improve the role and standards used to ensure the role is carried out to achieve the best standards are covered. These observations through time look at not only Ireland but at the United Kingdom, Europe and the United States of America also.

A brief history of hospitals in Ireland

Ireland in the early 1700s saw the introduction of the first hospitals which were set up to care for people that could not be cared for at home for whatever reason. These hospitals were set up using public money and donations. As Ireland was under British rule, the British government introduced the "Workhouse" system whereby the less well-off people of the country could access hospital-type care, medication and care of medical professionals. The Catholic Church was also influential in how healthcare in Ireland should be governed and provided. The Church maintained that the state should not be responsible for the care of its people and that the state should only intervene if and when the family failed in its duty of care towards family members.

As noted by Donnelly (2015) 'in the early eighteenth century the establishment of voluntary hospitals by philanthropists, mainly in Dublin but also in the larger provincial towns started a change. Jervis Street Hospital (the Charitable Infirmary) was the first voluntary hospital in Ireland and was founded in 1718. Many of these, like Dr. Steven's Hospital (founded in 1733) and Mercer's (founded 1734) would survive into the twentieth century. The eighteenth-century also saw the establishment of specialist hospitals, most of them voluntary, such as the Rotunda Lying-in Hospital, founded in 1745 for maternal and womens health, St. Patrick's Hospital for mental illness, founded in 1747 and the Westmoreland Lock Hospital, for the treatment of venereal disease, in 1792'. We can see from the above that, with the setting up of hospitals and care centres around the world caring has existed for centuries.

Development of hospitals in other countries

Looking beyond Ireland we find that humanity has always felt a sense of duty when it came to the care of others especially the sick and infirm. The first hospitals built in ancient times, were in Sri-Lanka and India in the year 200BC. Christians founded many hospitals in the fourth century, the first in what is now Turkey between 330 and 379BC. Most of the hospital workers or carers were members of religious orders such as monks or nuns.

Moving through time more and more hospital type buildings were created, with buildings and areas being set up to care for lepers and other diseases. Alms-houses were set up after the Reformation. Early hospitals in the UK were established in the 18th century, with Guys Hospital, London being the first one in 1724. Great Ormond Street Children's Hospital in London was established in the 1852. The first in USA was in in 1751.

Pre-1900's Healthcare

In the Ireland of this era, family caring was usual. Nature and nature's products were believed to be the cures for various ailments. In the larger cities worldwide the risk of infection spreading among the population was contributed to by squalid, damp and unhygienic living conditions. People contracted diseases; epidemics such as the black plague which wiped out huge proportions of the population developed. In Germany in 1892 there was a large cholera outbreak due to poor water treatment processes of drinking water. It was usually the crowded lower-class areas that suffered most; upper classes tended to ignore what was happening or blamed people themselves because of the way and conditions in which they lived. Some assisted by donating land to the church or state on which buildings were erected in which the ill were cared for, usually by members of religious orders or by people who volunteered their time to assist and help. Buildings included workhouses, houses for fallen women, houses for cholera and plague victims. These led to the development of hospitals, some run by the church with care staff who were orderlies and usually of a servant background. At this stage, governments started introducing compulsory health care for citizens and the hospitals being built were state-run. This resulted in a growing demand for trained carers such as nurses and nursing aides. Training at this time included the possibility of starting as a nursing aide, then after some years of training and practice one would become a trained nurse (Barrington, 1987).

The following Figure (Figure. II.1) presents the upward trajectory of population in the United States of America and available hospital beds. The figure comes from the article "Hospital Service in the United States: Twelfth Annual Presentation of Hospital Data by the Council on Medical Education and Hospitals of the American Medical Association," (JAMA, 1933)
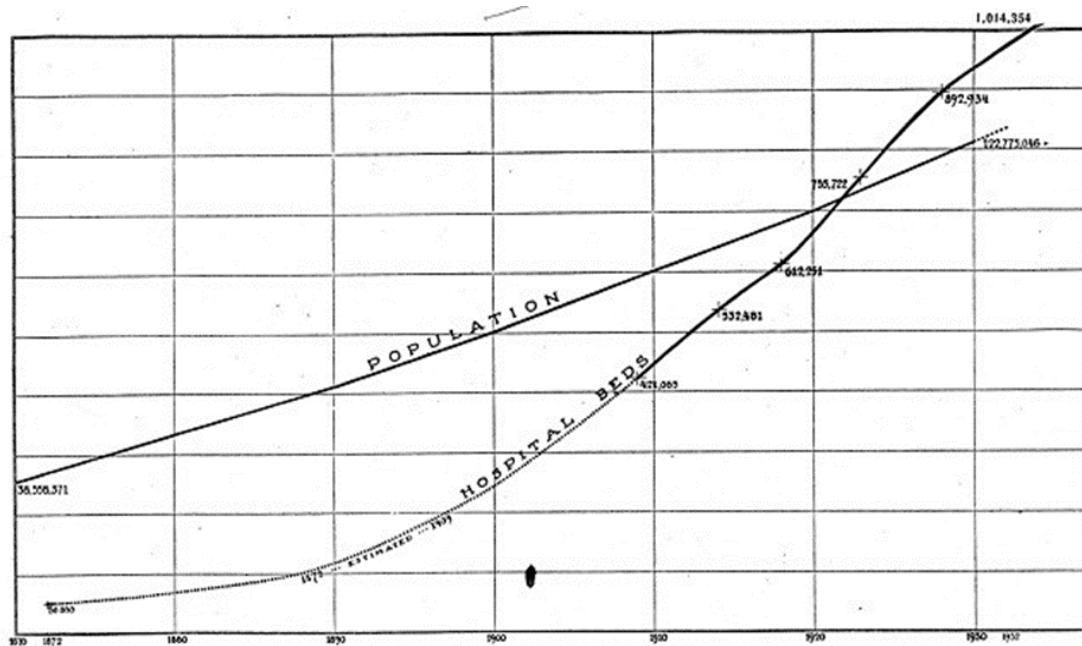
Figure II. 1 Hospital Capacity and General Population, 1872-1932

The 1900's to the First World War

Caring in the1900s was not dissimilar to the care work that was being carried out around the world up to that point. There was a growing recognition of a profession where the nurses, nurses' aides, orderlies needed to be fully and properly trained. In Britain, the Imperial Army on the approach to and during the First World War was opposed to female nurses joining the ranks of those willing to help with injured solders, unless they were members of Queen Alexandra's imperial military nursing service. This resulted in many nurses joining the French and Belgian armies instead. The British army only had about 300 nurses in its service. However, as casualties mounted, nurses were recruited, and by the end of the war, there were 10,000 nurses in service.

As Ireland was under British rule, most of the volunteers served under the British army. 90,000 volunteers worked at home and abroad during World War One. They provided vital aid to naval and military forces, caring for sick and wounded sailors and soldiers.

County branches of the Red Cross had their own groups of volunteers called Voluntary Aid Detachments (VAD). Voluntary Aid Detachment members themselves came to be known as 'VADs'. Made up of men and women, the VADs carried out a range of voluntary positions including nursing, transport duties, and the organisation of rest stations, working parties and auxiliary hospitals. VADs were sent abroad during both world wars to countries such as France, Italy and Russia. Male detachments were frequently sent to France to work as transport officers or orderlies in hospitals (BRC, 2018).

At the outbreak of the war, many people were inspired to train to help the sick and wounded. Women needed to be taught first aid, home nursing and hygiene by approved medical practitioners.

On the outbreak of the First World War, local Red Cross working parties formed across the

Figure II. 2 Volunteers During WWI including VADs & Nurses

country with the co-operation of their surrounding villages. They organised the supply of hospital clothing including socks, shirts, blankets and belts for soldiers. They also made essential hospital equipment such as bandages, splints, swabs and clothing. VADs undertook air raid duty in London. The emblem of the Red Cross seemed to inspire a certain feeling of confidence in the crowds which gathered in the underground railway stations and other shelters. Armed with a respirator, the VADs performed first aid (BRC, 2018). At railway stations, VADs provided food and other supplies for soldiers arriving by ambulance train whilst they waited to be transported to local hospitals or to travel on to another destination. Male detachments were almost entirely in charge of transporting sick and wounded soldiers from ambulance trains or ships to local hospitals. They also ferried patients between hospitals.

Three hospital trains in France carried 461,844 patients throughout the war. Hospital ships and barges were also used to transport patients. As the number of injured servicemen rose, a call was made for women to join the medical profession. Medical degrees were opened up to women for the first time. Female VADs carried out duties that were less technical, but no less important, than trained nurses. They organised and managed local auxiliary hospitals throughout Britain, caring for the large number of sick and wounded soldiers. Many were also deployed abroad to help in field hospitals (BRC, 2018).

A famous name in nursing and care of the sick was the most notable Florence Nightingale, born on 12 May 1820 in Florence, Italy. From an early age, she felt it was her calling to become a nurse, but mainly due to class and gender prejudices of her time, Nightingale only trained to become a nurse when she was thirty-one years old (Dated Events, 2016).

Nightingale worked as a lead nurse who led a group of nurses working at a military hospital during the Crimean War at Scutari, Turkey (Ottoman Empire). Nightingale was always a pioneer for hygiene and public health. She was appalled by the conditions in the hospital and began gathering extensive statistics about the health of the soldiers she treated. She often worked around the clock and visited her patients late at night carrying a lamp for light. This resulted in her nickname 'the lady with the lamp' (Small, 2019).

Nightingale sought for the conditions in the hospital to improve, which was met with much resistance. Eventually however, thanks to her contacts at The Times newspaper, Nightingale was given the task of improving the quality of the sanitation in the military hospital. She was able to dramatically reduce the death rate of patients, and this began a life-long effort to better health by improving the treatment environment. Florence Nightingale brought a team of 38 volunteer nurses to care for the British soldiers fighting in the Crimean War, which was intended to limit Russian expansion into Europe. Nightingale and her nurses arrived at the military hospital in Scutari and found soldiers wounded and dying amid horrifying sanitary conditions. Ten times more soldiers were dying of diseases such as typhus, typhoid, cholera, and dysentery than from battle wounds (Dated Events, 2016).

The soldiers were poorly cared for, medicines and other essentials were in short supply, hygiene was neglected, and infections were rampant. There were no towels, basins, or soap, and only 14 baths for approximately 2,000 soldiers. The death count was the highest of all hospitals in the region. Nightingale believed the main problems were diet, dirt, and drains—she brought food from England, cleaned up the kitchens, and set her nurses to cleaning up the hospital wards. A Sanitary Commission, sent by the British government, arrived to flush out the sewers and improve ventilation (Small, 2019).

Nightingale's accomplishments regarding her projects during the disastrous years the British army experienced in the Crimea were largely the result of her concern with sanitation and its relationship to mortality, as well as her ability to lead, organize and to carry out tasks in a timely manner. She fought with those military officers that she considered incompetent; they, in turn, considered her unfeminine and a nuisance. She worked endlessly to care for the soldiers themselves, making her rounds during the night after the medical officers had retired. Nightingale and her team of nurses were the only ones

willing to assist the ill solders. The London Times referred to her as a "ministering angel." Nightingale's work brought the field of public health to international attention. She was one of the first in Europe to grasp the principles of the new science of statistics and to apply them to the military and later civilian hospitals. In 1907 she was the first woman to be awarded the Order of Merit. Nightingale's image has often been sentimentalized as the epitome of femininity, but she is especially remarkable for her intelligence, determination and an amazing capacity for work (Dated Events, 2016).

Nursing and Caring during the years of the Second World War

During World War II nurses and the nursing profession were taken much more seriously as a properly recognised profession with nursing staff being better paid, better catered for and not underestimated as in previous times. Looking at America during World War II, over 59,000 nurses served under the American forces. They worked closer to the front lines than ever before and they contributed to a much lower mortality rate among troops than previous times of war. This recognition led to the army in 1944 granting officer commissions to nurses, giving them equal pay status, retirement pensions and dependants allowances. Nursing and caring professions were becoming recognised more for their contribution and importance.

A significant advance was that nurses and nursing students were given access to free education between 1944 and 1948. Military service took men and women from small towns and large cities across America and transported them around the world. Their experiences during times of war improved their lives, gained the profession more respect as a valuable contribution to society, as well as increasing their expectations from life. After the war, many veterans, including nurses, took advantage of the increased educational opportunities provided for them by the government. World War II changed American society irrevocably and **redefined the status and opportunities of the professional nurse.**

In July 1943 a formal four-week training course was authorised for newly commissioned nurses. This taught nurses about army organisation, military customs, field sanitation, and defence against air, chemical and mechanical attack. It also stressed the importance of property responsibility, military requisitions and correspondence. Nurse anaesthetists were in short supply in every theatre of operations, so the Army developed a special training programme for nurses interested in that speciality. More than 2,000 nurses trained in a six-month course designed to teach them how to administer inhalation anaesthesia, blood and blood derivatives, and oxygen therapy as well as how to recognize, prevent and treat shock.

Nurses specializing in the care of psychiatric patients were also in great demand. One out of every twelve patients in Army hospitals was admitted for psychiatric care, and the Army discharged approximately 400,000 soldiers for psychiatric reasons. The Surgeon General developed a twelve-week programme to train nurses in the care and medication of these patients.

The demands of the armed forces for nurses led to a shortage of civilian nurses. In 1943 an act was passed which set up a programme for cadet nurses. The government subsidised the education of nurse students who promised that on completion of their training that they would engage in important military or civilian nursing for the duration of the war. The government also subsidised nursing schools willing to accelerate their programme of study and provide nurses with the main body of their training within two and a half years and spend the last six months of their training in a civilian or military hospital which would in turn help alleviate the nursing shortage. Possible assignments included hospitals run by the Army, Navy, Veterans' Administration, Public Health Service, and Bureau of Indian Affairs. The Cadet Nurse Corps training programme was extremely successful and enjoyed enthusiastic public support (Feller and Moore, 2016).

Caring from the 1950s through to the 1980s

In recent years in Ireland, the subject of caring for the older person in their own home has received much attention. Up to the 1950's, much of the residential care in Ireland was institutional care. The Christianisation of Ireland saw much of the care of the sick and elderly being conducted in and under religious and monastic orders. With the reformation of Ireland in the sixteenth century, we saw the dissolution of monasteries and monastic style care. After this for quite some time, care of the sick and elderly in Ireland was very sporadic and was not a topic that was discussed much.

It is of note that during the years that followed, care in institutions under the state was not really aimed at the elderly but more towards the sick, the poor and people who came under the heading of deviant. There were dominant religious orders in Dublin that played a large role in setting up community care services. These were The Little Sisters of the Poor and The Little Sisters of the Assumption. Within the convents, care homes and also in people's own homes the care was directed mainly at the poor and the sick. There were many organisations around the country that were involved in the community care style of work (Legion of Mary, 2019). In 1938 "St. Brendan's Ladies Aftercare Committee" was founded. Their objective was to care primarily for the elderly. Members of the organisation were recruited from friends and contacts of the Committee. In 1960 it was reported that 90% of the Committee was employed at various occupations including offices, shops and the Civil Service. Clients referrals were supplied by the St Brendan's Hospital Medical staff who met with the Committee every Wednesday evening to discuss the particulars of prospective clients. The number of visits a client received depended on the client's living arrangements and health. Older people living alone were given the most attention and, when ill, were visited twice daily, often for long periods. Care given included domestic cleaning, food preparation and laundry, assistance with filling out entitlement forms. Relaying information on entitlements was also regarded as being of prime importance. An annual grant of £12 increasing to £18 in 1956 was paid by the Department of Health to this committee to cover out-of-pocket expenses incurred by the volunteers. This organisation was also known by the recognisable name, the Legion of Mary (Legion of Mary, 2019).

Caring Through the 1990s to the Present Day

The 1990s in Ireland brought about change in how caring practitioners were trained, Nursing training changed from a certificate to a diploma, and formal training for Carers began with training courses through the Vocational Educational Committee's National Council for Vocational Awards (NCVA).These training courses were the start of pre-nursing courses, which were part of the professionalisation of nursing role and the unification of training standards. For many years, being a carer was a part of the training experience for nurses to be.

With the training of this new group of health care workers, the grade of Health Care Assistant (including maternity HCAs) was introduced in 2001. These were incorporated as members of the healthcare team to assist and support the nursing, midwifery, medical and allied health teams (HSE, 2018). A review of the training of HCAs in the public system to evaluate the National Pilot Programme for the Education of Healthcare Assistants in Ireland was carried out by The Department for Health and Children (2001). This evaluation covered the period from the beginning of the programme [November 2001] through to the completion of year one [August 2002]. The pilot training was then extended nationally and was then included in national listing of legislation for the employment of individuals who work in the care sector. To allow for those who had been working continuously before the training became nationalised, it was recommended that the course completion was allowed in a step wise design.

From 2001 a number of courses were created to allow those who wanted to become a HCA or Carers in a variety of fields to obtain the knowledge, skill and practice to work in their respective fields. Courses in Community Health Services and Nursing Studies were created through the NCVA, which was later incorporated into The Further Education and Training Awards Council (FETAC). This was a huge step in quality assurance. In 2012 (QQI) Quality & Qualifications Ireland took over FETAC, continuing the previous role of audit, assessment and regulation of training providers. This area is looked at in more detail in Section IV National & International Training, Rules & Core Competences.

In 2016 HCA and Carers Ireland (the Irish National Social Association for HCAs and Qualified Carers), came into being at the instigation of Ms. Allison Metcalfe. The Association has provided support and additional education for members by members qualified in Medicine, Nursing, Public Health, Health Science and Health Research. The support group has provided direct information regarding carer and HCA welfare, rights and easy to understand information regarding qualifications, legislation and laws pertaining to the practice of care. This group has also provided a platform for qualified individuals and agencies to present information for HCAs and Carers at national conferences annually.

In 2018 the Health Service Executive issued a tender, a study to 'review the role and function of healthcare assistants' within the public system. The ensuing report, based on qualitative works was a review of exciting literature and was published in July 2019, it elicited the views of HSE stakeholders and made a number of recommendations. However, it did not include much information of HCA's in Ireland (Brennan et al, 2019), quantitative information on Healthcare Assistants in Ireland remains scarce.

This study, undertaken to address that deficit, is the first large-scale study of Healthcare Assistants and Carers in Ireland. The objective was to carry out a study which would represent Healthcare Assistants and Carers in all areas of employment and assess their work experience across multiple domains. The remainder of the report describes the conduct and findings of the study.

In conclusion, it can be seen that the role, function, education and training of carers has changed over the years but the vocation of caring has not. At its core is the philosophy of caring regardless of age, gender, creed, politics or way of life, and to provide a quality research-led, best practice-driven service that cares holistically for all clients, patients, service users and residents. People are attracted to this career as it calls for a sense of duty and practice, to do what is right and to so beyond what is expected of the average citizen.

Chapter Two

Section II

Review of Issues Affecting Healthcare Workers: National & International Perspectives

"Ní neart go cur le chéile"

There is no strength without unity.

Irish Proverb

Introduction

The issues affecting healthcare workers are similar across the all categories of healthcare workers including nurses, doctors, healthcare assistants and allied healthcare professionals some which cause psychological distress or present with physical symptoms.

Factors which can result in physical and/or psychological distress are shown in Figure 2.2.1. Also shown are the inter-connections between common issues for healthcare workers and different forms of distress. Factors maybe intrinsic (i.e. relates to the role of a HCA) or extrinsic (ie. relating to management, human resources, terms and conditions or career matters). The connections presented have been identified in both qualitative and quantitative research.

Figure 2.2.1 Inter-relationships found within current literature

Perspectives on Issues for Healthcare Workers

Ireland

Like many countries, Ireland faces many issues with healthcare workers, such as burnout among doctors working beyond the European Work Time Directive (EWTD). This narrative is common in the caring professions with similar results being found in nursing and healthcare assisting groups (SIPTU, 2007).

Shift pattern work has been shown to present with related issues, most notably depression, changes in metabolism and the microbiome. There is a large body of research on circadian rhythms and health in healthcare worker groups. It has been noted that a regular circadian rhythm regulates human physiology and behaviour, and was observed in most studies to affect hormone secretion, sleep propensity and differences have been seen in electro-encephalographic (EEG) comparative case-studies. (Boivin and Boudreau, 2014)

Staffing shortages are evident in several hospital specialities (emergency medicine and geriatrics) along with evident shortages of doctors within general practice (Deloitte, 2018). There has been a shortage of nurses in Ireland to cope with the large and ever-growing patient cohorts that are being seen in clinical practice; The Health Service Executive began the campaign "Nursing in Ireland," to entice Irish qualified nurses to come back home, post emigration (HSE,2019).

Outside Ireland

Healthcare workforce issues are being felt across more and more countries, regardless of culture. Burnout has been well documented leading to increased workforce turnover and absenteeism which leads to further strain on an already stretched system (Chamberlain et al., 2017). Work pressures are seen as part of everyday life for health professionals. Cox et al. (2000) described the stress response as being "a mismatch between the perceived demands and the ability of the individual to cope with these demands".

Stress remains a mainstream issue, the stress in itself can prove useful (eustress) when the stressor is in response to an upcoming positive event (wedding or holiday), but negative stress can cause a plethora of health issues. Stress may result from work overload, high demands, poor work conditions, longer working hours, lack of control (autonomy) or lack of social support and rewards (Ogińska-Bulik, 2006).

Sutherland and Cooper (1993) have evaluated sources of stress in healthcare professions such as patients expectations, the pressure of the job demands, increasing fear of assault during visits, worry about complaints from patients, and also conflicts between the job tasks and the role demands. Doctors also complain about lack of control, lack of support, mainly lack consultation and communication, mundane administrative work, insufficient resources, staff shortage and lack of feedback about one's performance (Chambers and Belcher, 1997). Violence against healthcare worker has also been highlighted as an issue especially within emergency departments (EDs); dementia care and mental health care settings (Gates, Ross and McQueen, 2006).

Perspectives on Issues for Healthcare Assistants

Ireland

Issues specific to Healthcare Assistants and Qualified Carers in Ireland stem from both historical and social contexts. There has been limited research of Irish Healthcare Assistants. Some comparative studies have been carried out; one study in particular (Drennan et al. 2018) looked at a variety of issues across countries regarding HCAs, which is useful to ascertain differences and similarities between countries. Differences relate to different cultures, societies, skills used in practice, health systems and education systems. Generalisability is limited .

Specific issues which have been highlighted include pay, limitations regarding role progression, career promotion and underestimation of grading levels (Vail et al., 2011, Spilsbury et al., 2013, HSE, 2019, Drennan et al. 2018). Issues mentioned by HCA and Carers Ireland (2019) supporting document 'Portfolio on Legislation Regarding Staffing, Charity Begins at Home', to Dáil Eireann included seven key issues noted by its members regarding staffing throughout public and private sectors in all areas of care provision. These include advancement issues; poor pay; limited / zero-hour contracts including 'if and when' contracts; no registration or licencing system; physical bodily strain due to occupational hazards related to institutional issues and mental health issues. The same report also noted that those employed in the private sector were on average paid 40% less than their fellow Healthcare Assistant with the same qualification and experience within the public sector. This salary difference between public and private is seen in multiple publications, especially in countries where regulation of the role is non-existant.

The issue of stress is common. Carers may find the responsibility of caring stressful, specifically attending activities of daily living; medication administration and vital sign measurement. These may relate to aspects of their training.

Outside Ireland

The issues for Healthcare Assistants in Ireland are similar in other countries. Developed countries are experiencing an ever-increasing pressure on the primary and secondary healthcare services they provide for their citizens (HCN, 2004). Sibbad, Shen and McBride (2004) noted that causes of the aforementioned pressures include increased life expectancy and the consequential demographic shift to an ageing population; technological and pharmaceutical developments resulting in more sophisticated medical treatments; spiralling costs; increased patient expectations; and shortages of skilled healthcare professionals. The NHS Confederation (2003) noted that one way of addressing these issues is through changing role boundaries between staff groups by extending, delegating, substituting existing roles, or by introducing new ones. In the UK, for example, nurses are taking on tasks that were previously the preserve of doctors.

The absence of a clear professional identity and professional registration can result in qualified carers not being sure about their scope of practice, or members of multidisciplinary teams not being aware of the qualified carer scope of practice.

Chapter Two

Section III

Review of National & International Training, Authorisation & Core Competences
of the Role

"Go n-éirí an bóthar leat is do chosán cóngair

May your Journey, Long or Short be a Success"

Irish Proverb

Title of the Caring Role

The Healthcare Assistant title varies from country to country as is clear from the Table II.3.1 on Core Competences of Healthcare Assistants in Europe 2018 Study (otherwise called the CC4HCA). commissioned by the European Commission and completed by Schäfer et al. It highlights the occupational titles of Healthcare Assistants around Europe. (EC, 2018). It should be noted that this study looked at healthcare assistants only working in public sectors internationally.

Table II. 3. 1 Occupational Titles of HCAs and Carers as by EC (2016)

Country	Occupational Title	English Translation
Member States Consulted By CC4HCA Country Informants In 2015		
Croatia	Medicinska sestra; medicinski tehničar	Orderlies; Nurse; Nurse Technician
Cyprus	Βοηθός Θαλάμου; Βοηθός Οδοντιατρείου	Ward Assistants; Dentist Assistant
Estonia	Isikuhooldustöötajad; Hooldustöötajad tervishoius;Hooldajad tervishoiuasutustes	Care Worker, Healthcare Assistant
France	Aide soignante hospitalière; aide à domicile	Hospital & Home Healthcare Assistant
Greece	βοηθοί νοσηλευτών or νοσοκόμοι	Nurse's Assistants
Hungary	Ápolási asszisztens	Nursing Associate Professional
Lativia	Māsas palīgs	Assistant of Nurse
Lithuania	Slaugytojo padėjėjas	Nurse Assistant
Luxembourg	Aide-soignant	Care Assistant
Malta	Nursing Aides, Health Assistants, Paramedic Aides, Carers, Assistant Carers, Care Workers, Assistant Care Workers, Care & Support Workers, Social Assistants	N/A
Portugal	Técnico Auxiliar de Saúde	Technical Health Assistant
Romania	Infirmiera	Healthcare Assistants
Slovakia	Zdravotnícky asistent	Healthcare Assistants
Sweden	Undersköterska, vårdbiträden	Assistant Nurse, Nursing Assistant
Member States Consulted In The Contec Pilot Study In 2011/2012		
Austria	Pflegehelfer; Heimhelfer	Care Assistant, Home Helper
Belgium	Aide Soignante, Zorgkundige, Pflegehelfe	Healthcare Assistants
Bulgaria	Sanitaries	Health Assistants
Czech Republic	Not Reported	Medical Assistants
Denmark	Social- og sundhedsassisten	Social/ Healthcare Assistant
Finland	Lähihoitaja	Practical Nurse
Germany (lower Saxony)	Staatlich geprüfter Pflegeassistent	Certified Care Assistant
Ireland	**Healthcare Assistants**	**N/A**
Italy	OSS – Operatore Socio-sanitario	Auxiliary Staff, Social & Health Auxiliary Workers
Netherlands	Verzorgende IG, Helpende zorg en welzijn, Zorghulp	Individual Healthcare Carers, Health & Welfare Assistants, Care Assistant
Poland	Opiekun medyczny	Medical Carer
Slovenia	Not Reported	Nurse Assistant, Healthcare Technician, Practical Nurse
Spain	Técnico en cuidados auxiliares de enfermería	Nursing Assistants
UK	Healthcare Assistants, Health Care Support Workers, Nursing Assistants, Nursing Auxiliaries, Clinical Support Workers	N/A

The titles used in Ireland according to HCA and Carers Ireland include, Healthcare Assistant (HCA), Care Assistant, Home Care Assistant, Multi-Task Attendant, (MTA), Maternity Healthcare Assistants (MHCA), Qualified Carer, (Ward/Hospital) Attendant, Personal Assistants, Community Support Worker,

Nurses Aid, Nursing Auxiliary, which in essence all belong to the same profession but may use different titles depending on the area you work in.

In the USA nomenclature depends on state rulings. The most common titles include Certified Nurse Assistant (CNA), Nursing Aide, Auxiliary Nurse and in some cases some Orderlies undertake patient care activities.

Definition of the Role

The study consortium have accepted two definitions of the role, one provided by the International Standard Classification of Occupations (ISCO) expresses that: "Healthcare assistants provide assistance, support and direct personal care to patients and residents in a variety of institutional settings such as hospitals, clinics, nursing homes and aged care facilities. They generally work in support of health professionals or associate professionals" (Nivel, 2018).
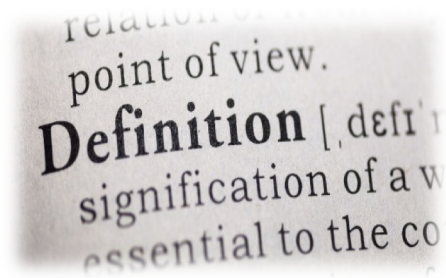
The second definition comes from the World Health Organization who have also defined the role in more detail. "Healthcare assistants provide routine personal care, support and assistance with activities of daily living to patients and residents in a variety of health care settings such as hospitals, clinics and residential nursing care facilities. They assist patients with personal, physical mobility and therapeutic care needs as per established care plans and practices, and generally under the direct supervision of medical, nursing or other health professionals or associate professionals," (WHO, 2010).

It has also been noted that occupations included this category generally do not require extensive health care knowledge or training as compared to other healthcare professionals. "Occupations classified here are workers providing services in health care settings such as hospitals, health care facilities, rehabilitation centres, residential nursing care facilities, and other establishments with permanent medical or nursing supervision," (WHO, 2010).

Training

Table II.3.2 observes the differences between Training of Healthcare Assistants and other related roles in Ireland, selected countries around Europe and the USA.

Table II. 3. 2 Training of HCAs; Descriptive Comparisons

	Ireland [1]	Europe* [2,3]	USA / Canadac
Role:	**HCA / Carer (Qualified)**	**HCA, CCA, LPN**	**CNA / HCA**
Entry Requirements	- Ordinary Leaving Certificate **Or** Leaving Certificate Applied - Experience required with mature entry - Two References (Academic or Character) - Clear Criminal Record (Garda Vetting) - Fluent in English Language	**United Kingdom** **Health Care Assistant** - No set entry requirement - Maybe asked for GCSEs/BTEC/ NVQ Healthcare qualification. - Experience Expected. - Expected to work towards 'care certificate'. **Germany** **Certified Care Assistant** - No set entry requirements - Maybe asked for Abitur or Fachhochschulreife (Secondary Education) **Finland** **Licenced Practical Nurse** - Secondary School Education	**United States of America** **Certified Nursing Assistant** - High school diploma or GED - Clear Criminal Record - Work as a Nurse's Aide for minimum 2 years (State dependant) 3 **Note** that this is dependent on each state. **Canada** **Health Care Aide (HCA)** 60 credits towards an Alberta High School Diploma - Minimum TOEFL**** score of 550 - Clear Criminal Record 4
Training Components	1 Year Course (Academic Year) 120 Credit Level 5 NFQ* Ireland (Level 4 EFQ**) - Multiple course types allow student to gain employment as a HCA 8 + different components 150-250 hours of Work Experience Required - More theory based than practice based	**United Kingdom** **The Care Certificate** - Training in Basic Nursing Skills - No clear timeline, Training is continuous until exam is passed **Germany** - Aprox. 2 years (2220 Hours) 43% of hours for Practical Experience, **Finland** - Lower Undergraduate† 3 Year Course (120 Credits) - Mix of Practical and Theory	**United States of America** Nursing Assistant Training Involves: - U.S Federal Regulations require at least 75 Training Hours. (Vary by state) Average 4-16 weeks - Need to pass a state certified nursing assistant program and the state exam in order to be certified **Canada** - Approx. 6 Months – 1 Year Depending on Students past Education - Up to 12 different components
Continuous Professional Development And/or Additional Training	- All HCAs and Qualified Carers must by professional standards keep all CPD including certificates up to date. - HIQA inspect that staff have all the required in date CPD in some settings.	**United Kingdom** May study for: a. CACHE*** level 2 Certificate b. CACHE***level 2/3 - Royal College of Nursing Training CPD events - NHS run CPD Training **Germany** - CPD ran by Closest Federal Ministry for Health Facility **Finland** - No CPD required. Funded by employer or employee, Professionally expected	**United States of America** - Vital CPD is completed by American Red Cross - CPD via Colleges as by State Law **Canada:** - HCAs can further their abilities by training in Pharmacology. - Community colleges and CNA (Canada Nursing Association) provide additional modules of CPD, Regulated by the Register of Health Care Aides.

* National Framework of Qualification, Ireland ** European Framework of Qualification

***Council for Awards in Care, Health and Education ****Test of English as a Foreign Language
Sources [1] QQI (2019), [2] Eurodeconia (2019), [3] NHS (2019), [4] OIG (2002), [5] Alberta Health (2019),
*Most Common Training Practices, ** State Dependant, † akin to Level 7

Training Outcomes

The three areas on which training for any vocation must be based, and on which it should be audited on are presented by the European Commission (2018) – European Skills/Competences, Qualification and Occupations.

- **Knowledge**

    The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is categorised as theoretical and/or factual;

- **Skills**

    The ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are categorised as cognitive (involving the use of logical intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);
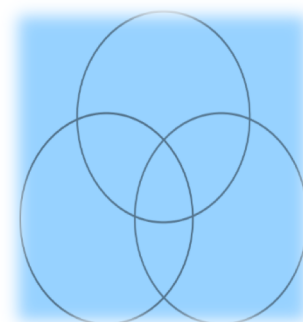
- **Competence**

    The proven ability to use knowledge, skills and personal social and/or methodological abilities in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.

Education and Training Systems (Ireland)

There is no legal requirement for HCAs in Ireland to undertake a recognised training programme. However the recommendation is for all HCAs to train to a level 5 NFQ course level or equivalent. In Ireland the educational authority which oversees the creation, review and audit of level 5 NFQ / 4 EFQ training is the Quality Qualifications Ireland (QQI), formerly The Further Education and Training Awards Council (FETAC)

There are currently five Major Awards within QQI training at level 5.They are:

- 5M2786 Community Care
- 5M3782 Health Service Skills
- 5M4339 Healthcare Support
- 5M4349 Nursing Studies
- 5M4468 Community Health Services

A major award is made up of 120 credits, with each module is valued at 15 credits, Students complete eight modules to obtain a Major Award. Each of these awards has the same purpose. *"To enable the learner to develop the knowledge, skills and competence to work under supervision in a range of community health service settings or to progress to further and/or higher education and training,"* (QQI, 2019). Some modules have skill demonstrations, others use simulated work experience but in entirety most learn via practical work experience which is a required module to gain the Major Award.

Most care settings require a full Major Award before a candidate begins full time employment. Nonetheless, some areas of care have deviated from this to allow for quicker employee recruitment. From advertising and the outsourcing of care, the Health Service Executive home care tender demand that private providers who partake within the tender process ensure that home care workers have a minimum of two modules to obtain work in this area; Care of The Older Person and Care Skills and to declare that the candidate will complete the remaining modules within 11 months to obtain the full Major Award, (HSE, 2018).

Within the nursing home sector the same two modules are required to begin full time work with the intention to complete remaining modules while working to attain a full Major Award.

Education and Training systems (Europe)

There is wide variation in the education of Healthcare Assistants throughout Europe, and in the training systems from which training is delivered. The most comprehensive outlines of the education of Healthcare Assistants in Ireland and within Europe include '**Provision of the Evidence to Inform the Future Education, Role and Function of Healthcare Assistants in Ireland'** by Drennan et al. (2018) and European Commission (2018) report on **'Core Competences of Healthcare Assistants in Europe (CC4HCA)'.** Previous to these publications the most comprehensive overview of the education and training of HCAs in Europe at that time was provided in Development and Coordination of a Network of Nurse Educators and Regulators (SANCO/1/2009) report (Braeseke et al., 2013). An issue affecting some countries regarding the education of HCAs include the generalisation of the training itself. Public delivery of vocational education has been reported to be more regulated regarding the material used, the quality of delivery of material and the generalisability of the course as a whole, operating in different locations but in words "Singing from the same Hymn Sheet".

Some countries in Europe as noted by the CC4HCA Study (European Commission, 2018), do not have a set curriculum, e.g.. Malta (different colleges pick course material), the United Kingdom and Germany as both countries are regulated at a regional level regarding what each regions Healthcare Assistants learn. But issues still persist even when regional control is used regarding vocational training. The Cavendish Report (2013) being an 'Independent Review into Healthcare Assistants and Support Workers in the NHS and social care settings,' notably stated that "overall, training is neither sufficiently consistent, nor sufficiently well supervised, to guarantee the safety of all patients and users in health and social care".

Registration of Healthcare Assistants

Registration of healthcare workers is not new. In Ireland medical doctors must register with the Medical Council, previously called the medical directory, which had listed practitioners since 1843. (RCSI, 2019). The nursing profession register with the Central Midwives Board and the General Nursing Council, established in 1918 and 1919 after the World War I in which nurses were registered via the Royal Red Cross Register (NMBI, 2019).

European countries including Croatia, Cyprus, Hungary, Latvia, Luxembourg and Slovakia have registries in place for Healthcare Assistants, for the betterment of the profession, safety of patients and the continued commitment to international standards for healthcare workers. Portugal has institutional registration whereby the employer must keep a continuous register for the Ministry of Health. (EC. 2018)

As described by Dimond (2003), an important role of a professional registration body is the keeping of the Register and deciding who can come onto it and who must leave it. A professional registration body should also be implicitly involved in this role for the determination of the standards of professional practice.

Mandatory registration is also useful from a human resource perspective having a live register where one can see registered stream, specialism, qualification, previous CPD, Skills and competences, previous healthcare experience, issues and health screenings all on one system, which would reduce the workload of HR offices nationwide offering a useable system which would be in alignment with EU GDPR regulation.

One report of HCAs and registration which shares similar issues to Ireland is the 'Francis Inquiry' into issues and failings of patient care at Mid Staffs NHS Trust in the United Kingdom. The inquiry report recommended that healthcare support workers should have a code of conduct and a mandatory registration system in place:

"The Inquiry concludes that the balance of the evidence is strongly in favour of a compulsory registration scheme for healthcare support workers, and the imposition of common standards of training and a code of conduct. It recommends that the NMC by the regulator. Such a register should include a record of the reasons for any termination of employment as a healthcare support worker. The possibility of a wider system for excluding those unfit to hold such posts should be kept under review." (The Mid Staffordshire NHS Foundation Trust Inquiry chaired by Robert Francis QC, 2010: Recommendation 195)

The Cavendish Review (2013), 'An Independent Review into Healthcare Assistants and Support Workers in the NHS and social care settings,' noted that Healthcare Assistants and other support staff need to be continually trained, the review revealed that

"The Patients Association and other groups called for formal registration to ensure " appropriate feedback and consistency in recruitment, training and professional development ". While formal registration is outside the scope of this review, the challenge is clearly how to achieve higher national standards in the absence of registration. Related to this, there needs to be a stronger sense that caring is a career". (Cavendish Review, 2013, 5.3.2).
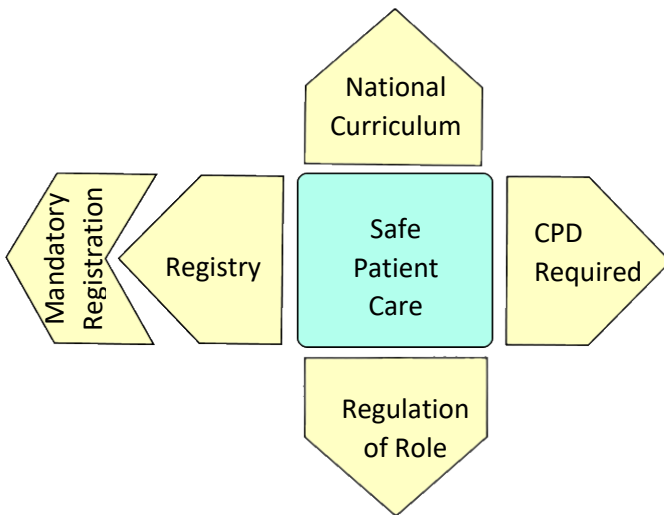
Figure II. 3. 1 Literature Key Findings

It has been noted in the 'Development and Coordination of a Network of Nurse Educators and Regulators,' otherwise called the SANCO report (2009), that their review which observed European states recommended "registration of HCAs through an organ of self-administration of the occupational group or a state agency. This registration should be seen in conjunction with the necessity of sustained continued education and self-improvement".

Table II.3.3 presents a qualitative overview of variables which affect patient safety. The following key is required to understand the table in its entirety.

: Yes, this country has this in place   : This Country does not have this trait

: Progress made

Table II. 3. 3 Education, Registration and Regulation of HCAs

	Ireland (ROI)	Germany	Greece	Hungary	USA	Canada
National Curriculum	1. Awarding body: QQI 2. State & Private providers 3. Each setting has its own quality assurance with QQI 4. Modules: Broad; QQI demand 3 core modules. 5.NFQ level 5/ EQF level 4	1. There is no national curriculum in place 2. Each German federal state decide on their curriculum	1. Awarding Body: OAED** 2. State provider 3. Modules included depend on stream Ex. Nursing Assistant, Nursing Home Assistant	1. Awarding Body: State 2. State Provided 3. National Framework EQF level 3 4. Modules include 50/50 split of theory & practice	1. Awarding body dependant on State. 2. By Healthcare Institution or by Community college* 3. Must pass State Exam	1. Awarding Body: Provincial State 2. Public & private providers* 3. Each Province controls Competence* 4. Uses Laboratory, classroom & practical components*
Qualification Required to Work	Public Sector: Required Private Sector: Not Required	Required	Required	Required	Required*	Required*
Regulation of Role	HCAs & Qualified Carers are unregulated healthcare staff	16 German federal states regulate the education of HCAs	Profession is regulated by Greek Law	Profession is regulated by Law and by ENNK*** Licence to work is Registration	Role is regulated by State and Board of Nursing*	Role is regulated by each State government*
National Registry / Register	No National or Provential Registry is in Place in the Republic of Ireland	No National or Provential Registry	No National or Provential Registry	Register is held by ENNK***	Register is held by State / Board of Nursing*	Called the 'Directory' Controls Core Competences*
Mandatory Registration to Practice	No Register in place	No Register in place	No registry in place	Licence is tied with registration	Mandatory*	Mandatory from Training*
CPD required by Regulation	CPD is required in all Settings & Sectors HIQA and similar bodies audit CPD	CPD is not lawfully required but is professionally expected in all settings	CPD is not lawfully required but is professionally expected in clinical environments.	CPD is not lawfully required but is professionally expected in clinical environments.	Required* Training agencies and Employer Model*	CPD is required but is based on an employer-employee level*

* State Dependant ** OAED: National Greek Labour Employment Agency.   *** ENNK: Health Registration and Training Centre)

Regulation of the Role

To understand what a regulated role is, we need to have a working definition; European Commission Directive 2005/36 defines a 'regulated profession' in the most fit for purpose manner as the following:

"A professional activity or group of professional activities, access to which, the pursuit of which, or one of the modes of pursuit of which is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications; in particular, the use of a professional title limited by legislative, regulatory or administrative provisions to holders of a given professional qualification shall constitute a mode of pursuit. Where the first sentence of this definition does not apply, a profession referred to in paragraph 2 shall be treated as a regulated profession"

(Directive 2005/36/EC, article 3, paragraph 1a)

The HCA profession is regulated in 14 EU Member States, namely Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Latvia, Luxembourg, the Netherlands, Slovakia and Spain (EC, 2018).

In many countries Healthcare Assistants are unregulated by law, it has been noted that unregulated care providers are assuming greater roles than ever before, being the 'arms and legs of patients, clients and service users alike while also being the 'eyes and ears' of other health professionals. (Kaasalainen et al. 2014)

In a direct form the literature states that unregulated care providers need to be regulated so that recognition of the additional duties that they undertake can be rewarded rightfully. Unregulated care providers need to be recognised as an essential workforce component of a sustainable and effective healthcare system that meet the goals of individuals and populations to which they serve their duty to.

There are many reasons for regulation for Healthcare Assistants and other roles similar to it. Table II. 3. 4 observe the rationale for regulation of current unregulated healthcare support staff.

Table III. 3. 4 Rationale for Regulation of Unregulated Healthcare Workers

The Worker	Society
Title	
Defined Scope of Practice	
Recognition for Duties	
Professional Practice Standard	
	Reduction in Failure of Care
Professional Educational Standard	
Clear Competences	
Controlled Access to Employment	
Terms & Conditions Apply to All	
Continuous Professional Development	
Registration of Workers	
Protects Patients, Clients & Service Users	
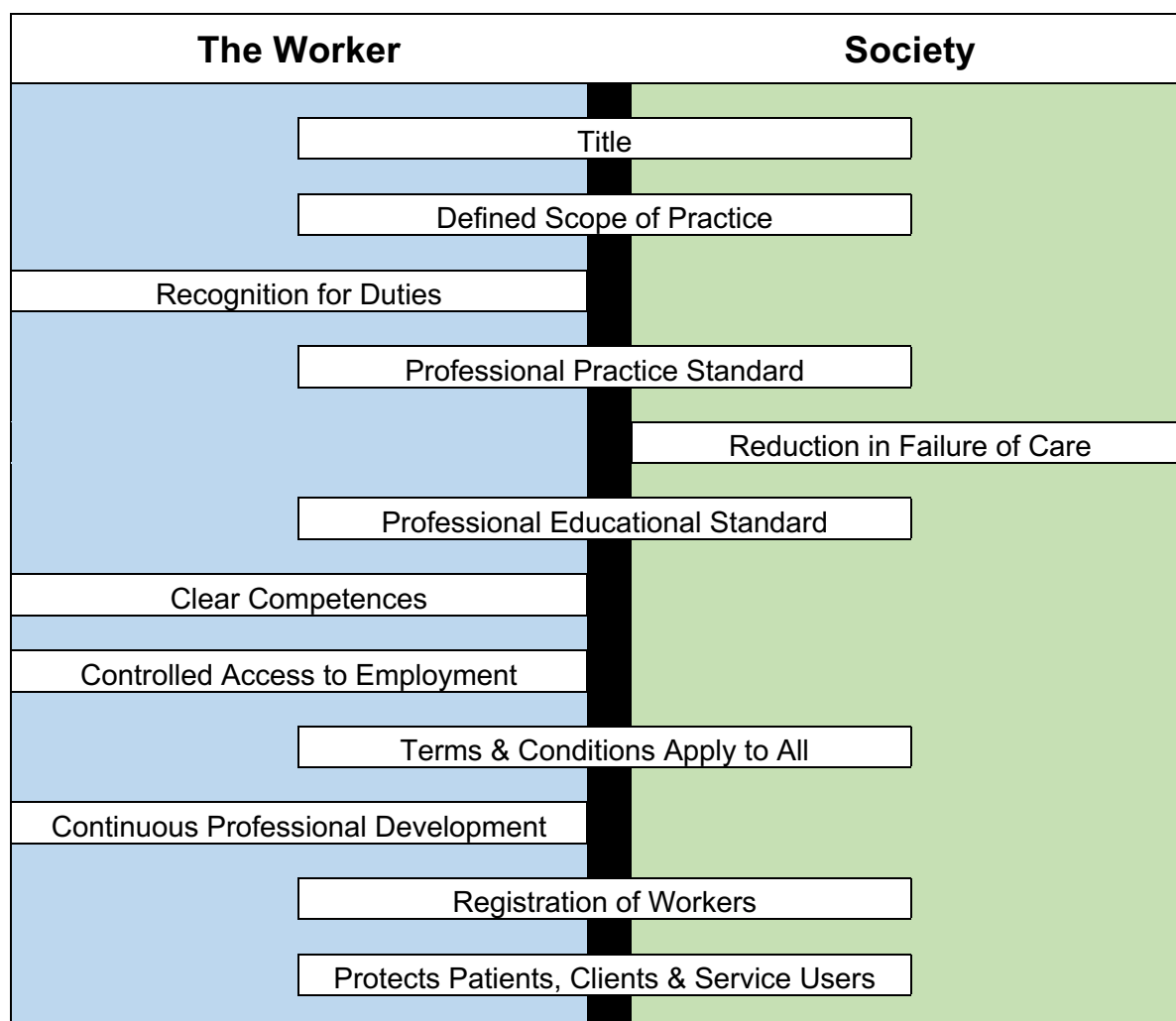
Regulation leads to advancement and improvements for society. Some findings suggest that the highly variable names used to describe unregulated healthcare workers is confusing, and that one term would be most helpful for the general public. Having a defined scope of practice was also noted as being important to both workers and patient groups.

Knowing that workers have mandatory and regulated continuous education and knowing that recognition and positive terms and conditions are in place for workers, gives patients and society a positive overview of the care they receive knowing that the care provider is being respected for their commitment for best practice, care and duty. (Saks & Allop [2007]; Griffith & Robinson [2010]; Hewko et al. [2015]).

Core Competences of Healthcare Assistants

The SANCO Study (2009) defines competences as

"a dynamic combination of cognitive and meta-cognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills. Fostering these competences is the object of all educational programmes. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any course). It is normally the case that competence development proceeds in an integrated and cyclical manner throughout a programme."
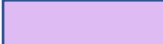
Each country has its own set of core competences regarding training, practice and continuous education of Healthcare Assistants. This section tries broadly to explain the best known competences of Healthcare Assistants in Europe and the United States of America and Canada. **Table II. 3. 5** aims to review the most common competences via the European Commission.

In Ireland, as a consequence with variability and lack of generalisability in training of HCAs, there is a lack of understanding regarding the competences of HCAs and this has consequences regarding the tasks that could be delegated (Glackin, 2016). HCAs in the same study also reported that this lack of understanding resulted in them receiving conflicting duties from RGNs and, subsequently, confusion regarding what could and could not be delegated.

Table II. 3. 5 Minimum Set of Core Clinical Competences for HCAs (Delphi CC4HCA)

		Ireland	Lithuania	Croatia	USA	Canada
A	**Work under** the **supervision of other healthcare professionals** to assist them in care provision	Correct	Correct	Correct	Correct*	Correct*
B	**Take responsibility** for their actions and justify them **professionally and ethically**	Correct	Correct	Expected but not reported	Correct*	Correct*
C	**Assess** basic **patient vital signs** and **care needs and requirements** without supervision and **report to other healthcare professionals** as appropriate	Depends on Setting, common in public hospitals. A part of training, but not always used	Correct	This role is only carried out by nurses, orderlies assist ADLs	Correct*	Correct*
D	**Assess** the **need** for **basic healthcare assignments** without supervision	Correct	Correct	Correct	Correct*	Correct*
E	Show **entrepreneurship & common sense**	Correct	Correct	Correct	Correct*	Correct*
F	**Carry out care assignments** according to a care plan without supervision	Only in certain settings Eg. Home care	Only in certain Settings	Not mentioned	Correct*	Correct*

Key: * Dependant on location and State

This is a core competency, * if used denotes correct in over 50% of states or Provence's

This is not a competency

Progress being made / applicable to some settings

As noted by the SANCO Study (2009) it is useful to divide the aspired professional competences for the Health Care Assistant Training into competence fields, focusing on what is important to each setting, rather than reductionist models which only look at acquired skills. This in itself can cause more issues than solutions as it stops the movement of HCAs, but multi-specialist models of training have been noted in a variety of countries to provide best outcomes for workers and patients alike.

The same study recommended that competences should be broken down into the following areas:

- **Subject Specific Competences:**
    - Basic/Essential nursing skills (ADLs & Vital sign observation)
    - Acting upon emergency situations / Changes upon observation
    - Recovery
    - Independence
    - Mobilisation
    - Palliative care
    - End of life care

- **Social - Communitive Competences:**
    - Receptive to constructive criticism
    - Dealing with conflict
    - Respectful patient contact
    - Implementing multifaced changes to care action by patients wishes

- **Methodological Competences:**
    - Gaining knowledge – practical and theoretical
    - Keeping knowledge
    - Health promotion
    - Supporting paperwork

- **Personal Competences:**
    - Balance of closeness and distance
    - Avoid anticipated stressors – handling them independently
    - Self-reflection and co-operation with other healthcare professional

Summary of Chapter Two

The Combination of the historical perspectives on caring, the review of issues affecting healthcare workers and the review of training and core competences outlined above led naturally to the specific aims of this study profiled below.

Specific Aims of the Study

In view of the absence of any data on Healthcare Assistants in Ireland, the association HCA and Carers in Ireland decided to complete a survey of HCAs to ascertain their background and training, skills profile, care settings and sectors, wellbeing, career satisfaction and surgestions for change on matters of relevance to the profession in Ireland. These were the overall aims of the study.

The specific objectives were:

- To profile the care settings in which HCAs are employed in Ireland;
- To ascertain the training undertaken and level of award achieved by HCAs;
- To ascertain the skills in which trained and the use to which such skills are deployed in their work settings;
- To examine differences in sub categories of HCAs by care settings (i.e. Hospital /Nursing Home /Home care /Intellectual Disability /Mental Health) and sector (i.e. public, private, public funded private, agency and Charity);
- To examine any risks or factors regarding working in certain settings and sectors including the esteem in which HCAs are held in different settings;
- To determine general wellbeing of HCAs overall and in different settings and sectors;
- To ascertain career satisfaction and satisfaction with working conditions;
- To establish HCAs views with respect to changes needed in the profession.

The hope is that data generated will inform opinion and contribute to better recognition and regulation of the profession.

Chapter Three

Study Methodology

The Importance of early statistical interventions

" To consult the statistician after an experiment is finished is often merely to ask him to conduct a post mortem examination. He can perhaps say what the experiment died of "

- Ronald Fisher, 1938

Study Methods

This is a quantitative, cross-sectional population-based study of Healthcare Assistants and Qualified Carers in Ireland to record wellbeing, career satisfaction and change within this vocational role. Research plan outlined in Appendix A.

Population

The population for this study were all members of HCA and Carers Ireland, the national association and support network for Healthcare Assistants and Qualified Carers in Ireland. Participants were employed in different areas of care during the study period which lasted two weeks to allow for work schedules and shift work and to obtain as many responses.

Sample Size

The number of HCA's and qualified carers in Ireland is not known, as there is no system of registration for this grade of healthcare worker. The number was estimated based on the numbers graduating from training programmes in recent years. However, it is not known how many are working at any one time. The estimated total number is in the region of 70,000. As there are no readily available surveys of HCAs from which to derive estimates of responses to similar questions, a prevalence of 50% for a specified response was chosen as the prevalence to reproduce in this study. With a margin of error 3% and a confidence level of 95% in the estimate derived, the sample size required would be 1,052.

Ethical Approval

An application for exemption from full ethical approval, on the basis of fully anonymous data provision, was made to the UCD Office of Research Ethics. The exemption was accepted. (Appendix B)

Data Collection and Consistency

Potential respondents were identified through the Healthcare Assistant and Carers Ireland Social Association. The study was advertised (Appendix C) Participant information was distributed prior to the survey instrument. Data were collected using two published and validated research instruments, **The General Well-being Schedule (GWBS)** and **The Minnesota Career Satisfaction Survey (MCSS)** were incorporated into an accessible Google form for online distribution (Appendix F). Completed questionnaires were returned online to the Principal Investigator. Answers were required to all questions, thus eliminating missingness. Questions were carefully worded and evaluated for ease of understanding, reducing jargnoisation. Data dictionary designed to interpret questionnaire responses is found in Appendix G.

GWBS: General Well-being Schedule

The General Well-being Schedule (GWB / GWBS) is a study instrument which gives a brief but broad-ranging indicator of subjective feelings of psychological well-being and distress for use in community/population surveys. The instrument presents 18 questions all relating to six different question topic areas. The GWBS was originally developed for the U.S. Health and Nutrition Examination Survey. Reliability of this study instrument has been evaluated by many previous studies all observing re-test reliability co-efficient scores ranging from 0.65 to 0.91. (UOM, 2019)

The following matrix presents GWBS sub-score areas.

Sub-score Labels	Q. Number	Question Topics
Anxiety	Q2	Nervousness
	Q5	Strain, Stress, or Pressured
	Q8	Anxious, Worried, Upset
	Q16	Relaxed, Tense
Depression	Q4	Sad, Discouraged, Hopeless
	Q12	Down-hearted, Blue
	Q18	Depressed
Positive Well-being	Q1	Feeling in General
	Q6	Happy, Satisfied with Life
	Q11	Interested in Daily Life
Self-control	Q3	Firm Control of Behaviour Emotion
	Q7	Afraid Losing Mind or Losing Control
	Q13	Emotionally stable, Sure of Self
Vitality	Q9	Waking Fresh, Rested
	Q14	Feeling Tired, Worn Out
	Q17	Energy Level
General Health	Q10	Bothered by Illness
	Q15	Concerned, Worried about Health

Results reported are split into sub-score levels which report the following variables: Anxiety; Depression; Positive well-being; Self-control; Vitality and General health.

The GWBS results can also be categorised into six levels; each level represents a different level of well-being or destress, that has affected each group. GWBS Category levels below include different levels of wellbeing which can be extrapolated from the scoring matrix. Lower combined scores indicate greater distress. Responses of 1 indicate respondent is most distressed with higher scores indicating less distress i.e. 5 = Least distressed. Each answer for each question is added to create a summative score (SS); that score is then matched to the following categorised score groupings below.

SS	Category
81–110	Positive well-being
76–80	Low positive
71–75	Marginal
56–70	Stress problem
41–55	Distress
26–40	Serious
0–25	Severe

MCSS: Minnesota Career Satisfaction Survey

The Minnesota Career Satisfaction Survey is also called the MSQ (Minnesota Satisfaction Questionnaire). The short form iteration was used within this project. It is comprised of twenty items. Question directionality flows negative to positive (as seen below). The short form Minnesota career satisfaction survey consists of three scales which observe different forms of satisfaction.

1 = Very Dissatisfied
2 = Dissatisfied
3 = Can't Decide
4 = Satisfied
5 = Very Satisfied

General Satisfaction: Refers to all areas of Career Satisfaction (How people feel about all facets about their job and the factors that change our perception of how people like their job / Career)

Intrinsic Satisfaction: Refers to occupational conditions (How people feel about the nature of the job's tasks; doing the job at hand)

Extrinsic Satisfaction: Refers to environmental conditions (How people feel about features of the job that are external to the work; i.e. Work conditions, pay, respect, management)

Question numbers related to each form of satisfaction are combined to make new variables.

Scale

Intrinsic	Q. 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20
Extrinsic	Q. 5, 6, 12, 13, 14, 19
General Satisfaction	Q. 1 – 20 inclusive

Changes Implemented

Investigators were aware of the limitation of time for respondents when designing this study instrument. Minor modifications to this instrument to include use of more colloquial language i.e. original instrument answer: 'Neither' was changed to 'Don't Know'. Additional questions from the long-form version of the Minnesota Career Satisfaction Survey were added and used only for correlation purposes and were not used in the model making of the scales above. To gain a greater understanding of the available results, categories were reduced into three distinct levels 1 = Low Degree of Satisfaction; 2= Average Degree of Satisfaction; 3 = High Degree of Satisfaction.

Data Management

Data management included actions to ensure that data were usable for analysis and for the meaningful synthesis of results to be reported. A project plan was drafted in the early stages of the (Appendix A). From the finalised and agreed plan, study instruments and study delivery, qualified research and data management professionals created a detailed data dictionary which aided survey delivery by making sure that question placement was logical and useful and reduced data editing. Data were entered into Excel, edited and imported into SPSS version 24 for statistical analysis. All files were protected via password protection and encryption and were kept on one computer; which was kept in a locked room for added security, backups were saved in a password protected external data drive.

New Variables Created

Categorised variables were created from raw scores from the general well-being schedule; Minnesota Career Satisfaction Survey. Settings of care were compiled within sector to created specified variables with both sector and setting being combined. Variables created can be found below.

Table III. 1 New Variables Created

GWBS_SUM	Each response for each question respondent answers is added into a summed total for each respondent
GWBS_Cat	Built upon GWBS_SUM, categories made by the predefined categorical cut off points. 1= Positive well-being; 2= Low positive; 3= Marginal; 4= Stress problem; 5= Distress; 6= Serious; 7= Severe; 9= Missing
Intrinsic_Satis	Numerical based; on the sum of all Intrinsic Satisfaction Question in Minnesota Career Satisfaction Survey
Extrinsic_Satis	Numerical based; on the sum of all Extrinsic Satisfaction Question in Minnesota Career Satisfaction Survey
General_Satis	Numerical based; on the sum of all Satisfaction Question in Minnesota Career Satisfaction Survey
Intrinsic_PC	Percentage variable of Intrinsic_Satis
Extrinsic_PC	Percentage variable of Extrinsic_Satis
General_PC	Percentage variable of General_Satis
Intrinsic_PCG	Built on Intrinsic_PC; 1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5=Highly Satisfied; 9= Unknown
Extrinsic_PCG	Built on Extrinsic_PC; 1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5=Highly Satisfied; 9= Unknown
General_PCG	Built on General_PC; 1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5=Highly Satisfied; 9= Unknown
Hosp_Pub	Combination of Hospital and Public Sector; 1= Yes; 0= No; 9 = Missing
Hosp_Priv	Combination of Hospital and Private Sector; 1= Yes; 0= No; 9 = Missing
NH_pub	Combination of Nursing Home and Public Sector; 1= Yes; 0= No; 9 = Missing
NH_priv	Combination of Nursing Home and Private Sector; 1= Yes; 0= No; 9 = Missing
HC_Pub	Combination of Home Care and Public Sector; 1= Yes; 0= No; 9 = Missing
HC_Priv	Combination of Home Care and Private Sector; 1= Yes; 0= No; 9 = Missing
ID_Pub	Combination of Intellectual Disability Care and Public Sector; 1= Yes; 0= No; 9 = Missing
ID_Priv	Combination of Intellectual Disability Care and Private Sector; 1= Yes; 0= No; 9 = Missing
MH_Pub	Combination of Mental Health Service Care and Public Sector; 1= Yes; 0= No; 9 = Missing
MP_Priv	Combination of Mental Health Service Care and Private Sector; 1= Yes; 0= No; 9 = Missing
Anxi	Numerical; Sub-Score Level; Combination of questions from GWBS
Dep	Numerical; Sub-Score Level; Combination of questions from GWBS
PosWB	Numerical; Sub-Score Level; Combination of questions from GWBS
S_Cont	Numerical; Sub-Score Level; Combination of questions from GWBS
Vital	Numerical; Sub-Score Level; Combination of questions from GWBS
GenHealth	Numerical; Sub-Score Level; Combination of questions from GWBS

Statistical Analysis

Descriptive Statistics

The frequencies and distribution of all variables were described by standard measures of central tendancy (Means, medicans) and quartiles (Standard deviation and ranges) as appropriate to the type of variable and level of measurement. Data were produced by subgroup such as. sector, care setting, satisfaction category, age and location (provincial).

Changes Implemented

Study instrument manuals for both Minnesota Career Satisfaction Survey and General Well-Being Schedule used means and standard deviation but variable types within these study instruments are ordinal by nature and therefore the central tendency for tests which used these instruments included medians, Interquartile ranges and full range (min-max).

Comparative Statistics

Differences and correlations in groups using appropriate statistical procedures All statistical tests were performed and analysed using a 0.05 significance level. To examine the relation between categorical variable the Pearson Chi-Square Test was used.

The correlation between variables was examined using the Pearson Correlation co-efficient or Spearman Rho as appropriate to find monotonic relationships between different variables. A monotonic relationship is a relationship that observes the following: (1) as the value of one variable increases, so does the value of the other variable; or (2) as the value of one variable increases, the other variable value decreases.

ANOVA (Analysis of Variance) was conducted to compare the effect of different care settings on general career satisfaction within the study sample. F statistic scores are obtained. Since this study observes multiple groups within one model, the Bonferroni adjustment was used to observe differences between ordinal sub-grouped variables, which limits the possibility of getting a statistically significant result when testing multiple hypotheses.

When more than one potential explanatory variable for an outcome exists, multivariable methods are required to adjust for possible confounding in this study the relationships of serval variable to the outcomes of interest were assessed using logistic regression results are presented as odd rations and confidence intervals.

Chapter Four

Results

"An approximate answer to the right problem is worth a good deal more than an exact answer to an approximate problem"

- John Tukey

Summary Results Infographic

CSTAR
CENTRE FOR SUPPORT AND TRAINING IN ANALYSIS AND RESEARCH

UCD DUBLIN

HCA&CARERS
IRELAND

Healthcare Assistants and Qualified Carers
A trained, underutilised and untapped resource
A population-based study in Ireland
Summary Findings

7.7%

93.2%

Area Type

21.5% Urban

46.3% Suburban

32.2% Rural

7.2%

12.8%

59.8%

19.6%

Provincial Breakdown of Study Sample

Age Category

61 – 70 Yrs	3%
46 – 60 Yrs	42%
31 – 45 Yrs	39%
22 – 30 Yrs	14%
≤ 21 Yrs	2%
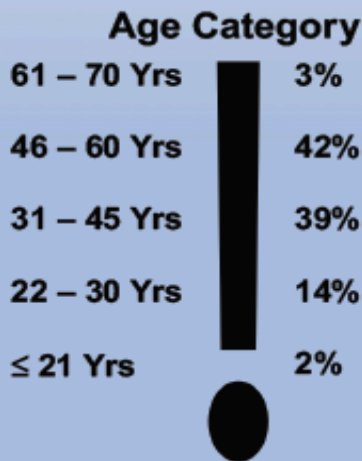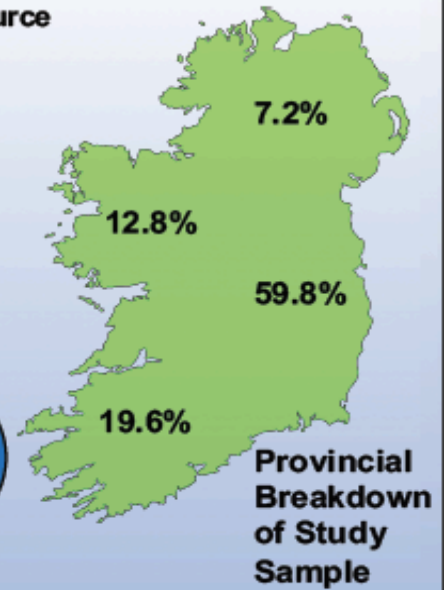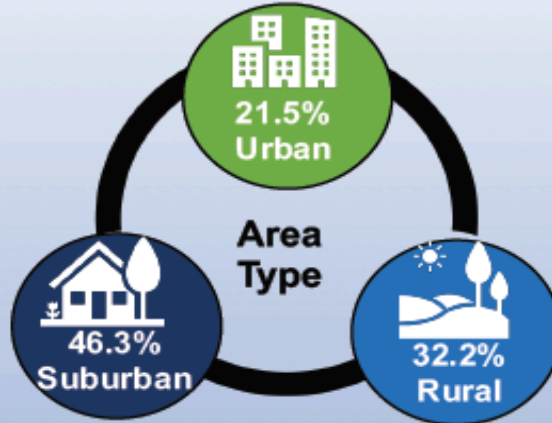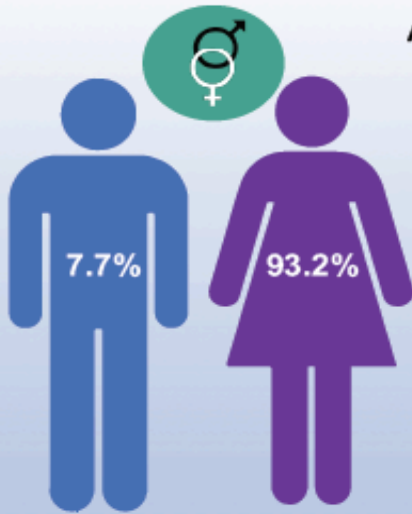
Employer Helping Employees?

Help 59%

Hinder* 41%
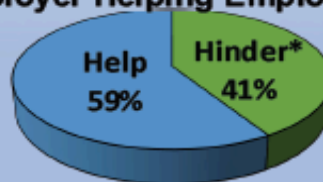
98% Agree with a License/Registration System

90% Believe Work Effects Their Health and Wellbeing

86% Believe that those with a 'Full Qualification' should be paid more than those working without

84%

Attained Full Qualification

41%

Senior Staff Member

Care Setting

Hospital 14%
Nursing Home 29%
Home Care 34.5%
Day Care Centre 3.2%
Charity Organisations 3%
Hospice 3.2%
Clinic 1%
Intellectual Disability 12%
Mental Health 3%
Addiction Services 0.3%

51.4% Believe that they are not listened to by management

Sector

25% Public

17.5% Agency

38% Private

11% Public Funded Private

5.7% Charity Organisation

* Hinder: to make harder

Skills Breakdown

Trained Skills

- 77% ADLs
- 50% Carers Notes
- 47% Dementia Care
- 42% Palliative Care

Skills in Practice

- 77% ADLs
- 65% Carers Notes
- 41% Dementia Care
- 43.5 % Fluid Balance

Statistical Associations

Significant associations found**

- **59** Associations found in 'Trained'
- **110** Associations found 'In Practice'
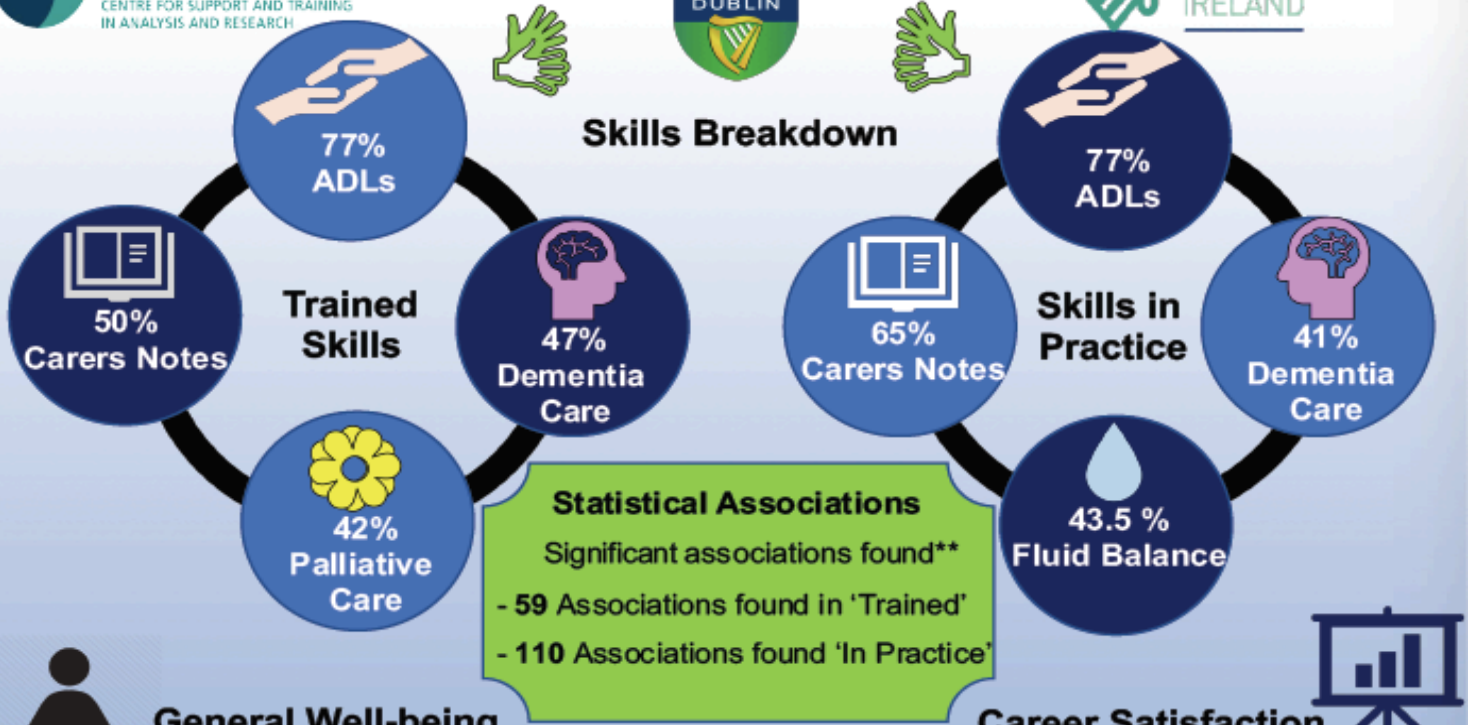
General Well-being
(Entire Study Population)

Positive Well-being	40.8%
Low Positive	13.4%
Marginal Well-being	13.2%
Stress Problem	25.3%
Distress Issues	6.0%
Serious Issues	1.4%

Hospice Care, Addiction Care and Mental Health Services (public & private) were found to have the largest proportions of positive well-being among the study sample

Career Satisfaction
(Entire Study Population)

	General Satisfaction	Intrinsic Satisfaction	Extrinsic Satisfaction
Least Degree	1.8%	2.7%	3.9%
Average Degree	87.4%	91.4%	43.0%
High Degree	10.8%	5.9%	53.1%

27 cases of 'Can't Decide,' over the three satisfaction groupings was observed. This inflates the average degree of satisfaction. The addiction services care setting group noted an inability to decide if they were satisfied for not on all satisfaction scales

Correlations
Spearman Rho

27 monotonic correlations were found; all results were statistically significant with p-values < 0.01.

5 Strong Correlations were found all presenting with Coefficients above 0.6

Correlations
Spearman Rho

23 monotonic correlations were found; all results were found to be very statistically significant with p values < 0.01.

15 Strong Correlations were found all presenting with Coefficients above 0.6

Conclusions

These results are a part of a larger study which demonstrate differences, relationships and highlighted factors connected to a variety of Care Settings and Sectors. *For more details read the full report at www.hca.ie*

* ADLs = Activities of Daily Living
** = Chi-Sq p-value: <0.01

Pg 2 of 2

Section I

Whole Study Population Frequency and Distribution

Part A: Sociodemographic and Employment Characteristics

Table IV. 1 Sociodemographic Characteristics of the entire study population

Sociodemographic Characteristics		n	(%)
Gender (Sex)	Male	143	(7.7)
	Female	1703	(92.3)
Age (Years)	≤ 21	34	(1.9)
	22-30	265	(14.4)
	31-45	718	(38.9)
	46-60	775	(42.0)
	61-70	54	(2.9)
Location (Provence)	Leinster	1104	(59.8)
	Ulster	132	(7.2)
	Connaught	236	(12.8)
	Munster	374	(19.6)
Location (Area Type)	Rural	595	(32.2)
	Suburban	854	(46.3)
	Urban	397	(21.5)
Sector	Public	563	(25.0)
	Private	759	(37.8)
	Public Funded Private	219	(10.9)
	Agency[1]	351	(17.5)
	Charity Organisation	115	(5.7)
Care Setting	Hospital - Based	306	(14.1)
	Nursing Home	629	(29.0)
	Home Care	746	(34.5)
	Day Care Centre	69	(3.2)
	Charity Organisation	65	(3.0)
	Hospice	17	(0.7)
	Clinic	7	(0.3)
	ID* Care	253	(11.7)
	Mental Health	64	(2.9)
	Addiction Services	7	(0.3)

A total of 1,846 carers responded to the questionnaire. There was a preponderance of females (92.3%).

The largest age group was those aged 46-60 years; with a downward progression for ages 31-45 years (38.9%) and ages 22-30 years (14.4%). The smallest age groups included those aged under 18 and those aged 18-21 years (1.8%).

Almost 60% of carers were from Leinster .

Suburban based HCAs presented as being the largest group within this sample. Urban based HCAs were observed as being the smallest group.

Respondents who worked in the private sector presented as the largest group with 37.8% of the entire sample; this was followed by those who work within the public sector (25.0%) and those working within the agency sector (17.5%).

Regarding settings of care, the largest group represented were those who work in home care settings (34.5%); those working in Nursing home settings was the second largest with 29% of the sample. Those working within a hospital setting (14.1%) was the third largest group recorded. Those working in addiction services and within Clinic based settings presented as the smallest groups. 23.5% of the sample work had multiple caring jobs.

---

[1] NB. Agency Workers are included in the Area their Agency Work in,
Ex. An agency worker who works in a Public Hospital are included in both Agency and Public.
*ID: Intellectual Disability Care

Table IV. 2 Training and Sociodemographic Characteristics of the Entire Study Population

Sociodemographic Characteristics		n	(%)
Multiple Caring Jobs	Yes	432	(23.5)
	No	1410	(76.5)
Senior HCA / Carer	Yes	749	(41.0)
	No	1097	(59.0)
Full Award	Yes	1551	(84.0)
	No	295	(16.0)

41% of respondents were senior Healthcare Assistants / Qualified carers and this was determined by both years of working (over 10 years of practice or holding an NFQ LVL 7-10 Diploma or Degree). 84.0 % of the study population are in the possession of a Full FETAC/QQI level 5 Award. While 16.0% have gained employment by being in possession of the minimum required modules. Figure IV.1 observes the gender division within this study's sample.
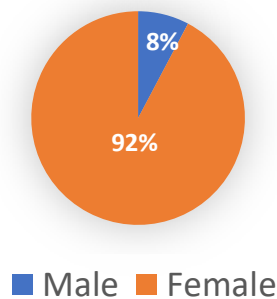
Figure IV. 1 Sex (Gender) Expression
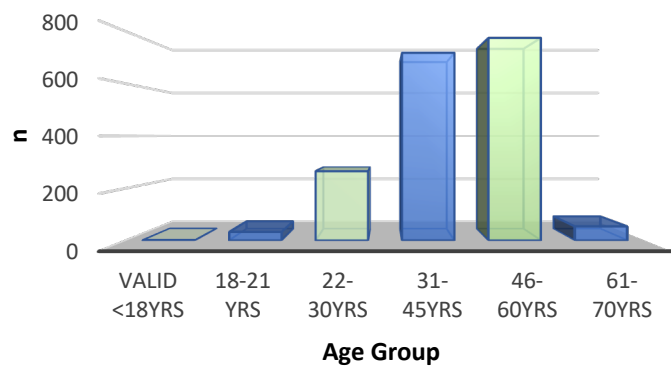
Figure IV. 2 Age Profile of Questionnaire Respondents

Figure IV.2 shows the difference in respondents by age groups; 46-60 years was observed to be the most common age group of the entire study population. This was noted with some surprise as younger age groups would usually be expected to be the most common within the industry in other countries.

51

Figure IV.3 represents the difference in frequency for respondents with regard to the area in which they live. Suburban areas were found to be the largest grouping with those in urban areas being the smallest. Figure IV.4 shows the location of respondents; the largest representation came from Leinster with 1104 respondents (59.8%); Munster based Healthcare Assistants were observed to be the second-largest grouping with 374 respondents representing 19.6% of the sample. Connaught based respondents presented as the next group with only 12.8% of the sample (236 counts). Finally, the Ulster group was the smallest group with only 7.2% of the study population (132 counts).

Figure IV. 3 Location type of Respondent
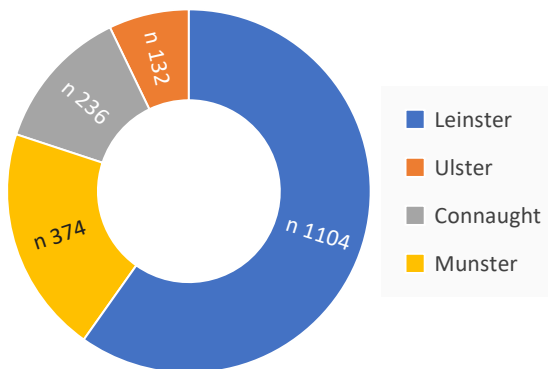
Figure IV. 4 Province of Respondents

Figure IV.6 observes the sectors in which the respondents are employed; the largest group (759 counts) within this variable were those employed in the private care sector (37.8%), working in a variety of care settings. The second-largest sector observed was the public sector (25.0% - 563 counts); working for state-owned healthcare facilities.

The 'Agency' sector includes all respondents who work locum positions; represented the third grouping which accounted for 17.5% of the study sample. Public Funded Private (PFP) represent those working in the private sector but under rulings of the public sector. Example being HSE funded home care via a private home care company. This group accounted for 10.9% of the entire study population. The smallest group charitable organisations accounted for 5.7% of the sample.

Figure IV. 5 Frequency of Study Population Work Sector
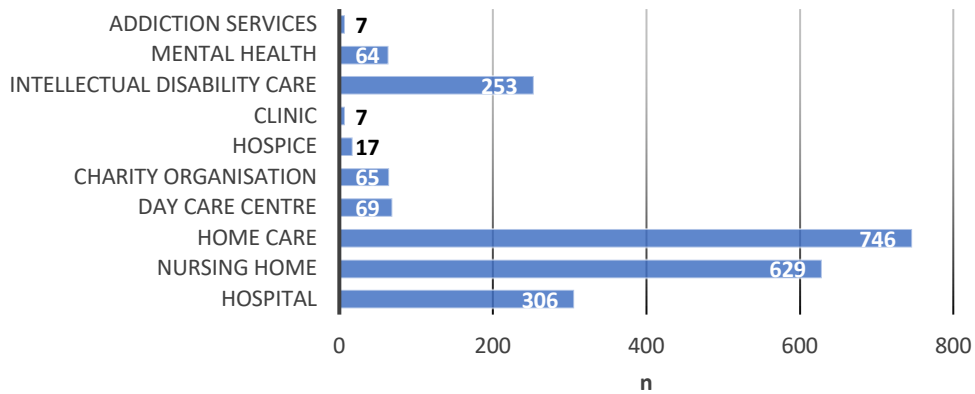
Figure IV. 6 Descriptive Frequency of Different HCA and Professional Carer Work Areas

Figure IV.6 observes the variation of care settings in which the respondent are employed. Home care was the most represented setting of care within this study with 746 respondents equalling 34.5% of the entire sample. The second largest group were those who work in nursing homes which included 629 respondents (29.0%). Those working in hospitals were noted as being the third-largest group with 306 respondents representing 14.1% of the study sample. The fourth group in this study population at 253 counts (11.7%) represented those who work in intellectual disability care settings.

The smaller groups represented included addiction services and clinic both represented the smallest groups with only 7 in both categories accounting for 0.3% each. Mental health services (2.9%), daycare centres (3.2%) and charity organisation (3.0%) represented similar categories counts.
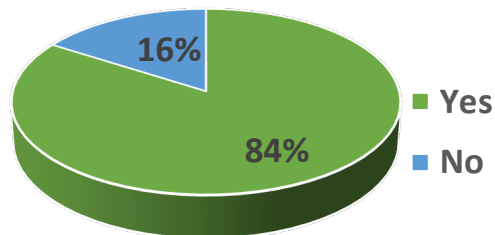
Figure IV. 7 Do you have a Full Award (QQI/FETAC)

Figure IV.7 represents the educational attainment of the study population asking specifically if the respondent has attained a full QQI or its former FETAC NFQ LVL 5 Award. 84% of the study sample have completed the full course. While 16% of the sample only have minimum required modules.

Figure IV.8 observes the distribution of respondents who specified that they work as a senior healthcare assistant / qualified carer; those respondents represented 41% of the study sample.

This study used those within the occupation for at least 10 years and/or had attained a higher qualification.
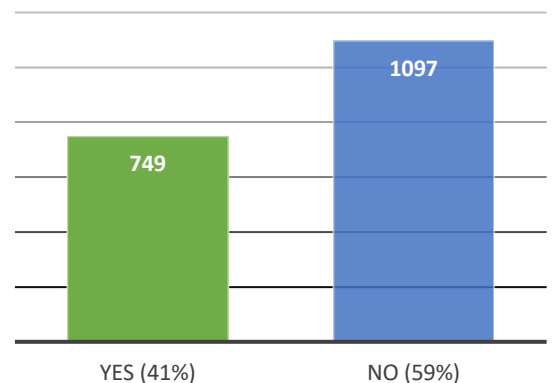
Figure IV. 1 Distribution of Senior HCAs & Qualified Carers
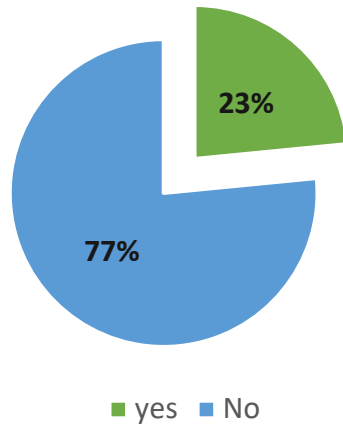
Figure IV.9 observed respondents employed in multiple caring roles simultaneously. 23% of the study sample noted that they worked multiple caring roles, while 77% of the sample noted they worked only one caring role at the time of the study.

Figure IV. 9 Do you work Multiple Caring Job

Part B: Employer - Carer Interactions

Table IV.3 show cases binary questions relating to employer carer interactions which include employers offering employees opportunities to upskill. 61.6% of respondents noted that their employers allowed employees to upskill. 38.4 % of respondents noted that employers did not allow them to upskill. This is also illustrated in Figure IV.10.

Respondents were asked if employers helped them in their practice of caregiving or if they hindered their practice. Respondents noted that 58.6% that employers helped them in their practice. 41.4% of the respondents noted that their employer hindered their practice. This can be also found in Figure IV.11. Respondents were asked if they felt they were being listened to

Table IV. 3 Employer - Carer Interaction Characteristics

Employer - Carer Interaction Characteristics		**n**	**(%)**
Does your Employer:	Yes	1138	(61.6)
Allow Opportunities to Upskill	No	708	(38.4)
Help or Hinder Your Work or Practice	No	708	(38.4)
	Help	1082	(58.6)
	Hinder	764	(41.4)
Do you feel you are Listened to by Management	Yes	897	(48.6)
	No	949	(51.4)
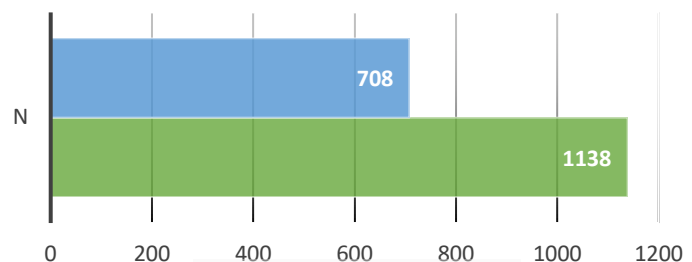
Figure IV. 10 Does Employer allow you opportunities to Upskill
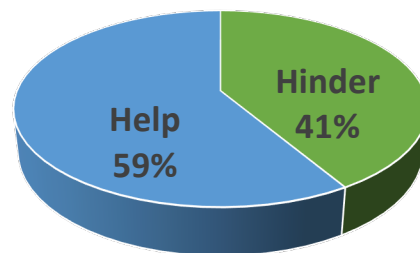
Figure IV. 11 Does your Employer Help or Hinder your Work

54

Figure IV. 12 Do you feel you are listened to by management?
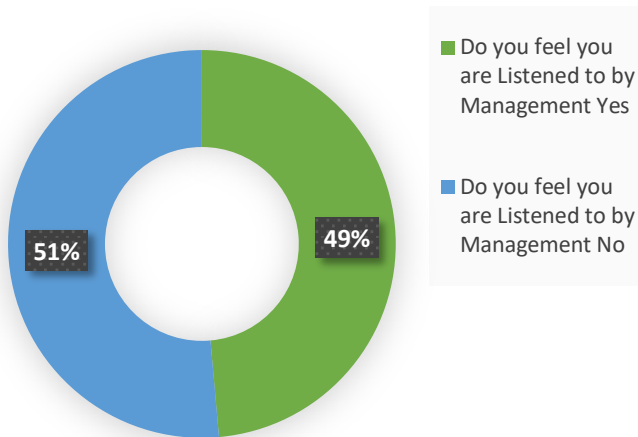
by management; 48.6 % of the study population feel they are being listened to by management while conversely 51.4% feel they are not listened to by management, this is also illustrated in Figure IV.12.

Part C: Issues Relating to Whole Study Population

Table IV. 3 Employer - Carer Interaction (Cont.) Characteristics of Issues affecting HCAs

Table IV.3 describes issues which affect healthcare assistants and qualified carers, such as pay, health and licensure of their role.

86.1% of the study population (1588 counts) believe that those who are qualified with a full award should earn more than those working with lesser qualification attainment; 13.9% believe that educational attainment should not be rewarded.

Characteristics of Issues Affecting HCAs		n	(%)
Should those with Full Award be paid more compared to those who do not?	Yes	1588	(86.1)
	No	257	(13.9)
Does Your Work Affect your Health and Wellbeing?	Yes	1657	(89.8)
	No	189	(10.2)
Should there be a Licence System set up for all HCA & Professional Carers to Stop Repetitive Bad Practice?	Yes	1809	(98.0)
	No	37	(2.0)
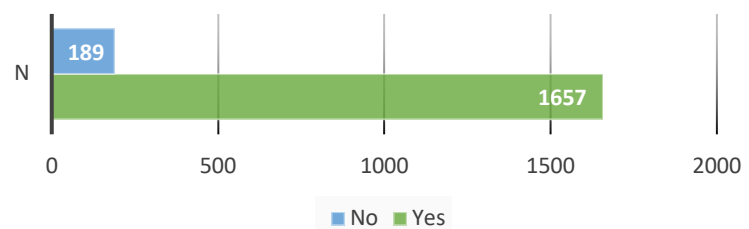
Figure IV. 13 Should those with Full Award be paid more compared to those who do not?

This can be seen in Figure IV.14. 89.8% of the study population state that their work affects their health and wellbeing this can also be seen in Figure IV.15 were 98.0% of the sample agreed that a licencing system needs to be set up for all Healthcare Assistants (HCAs) and Qualified Carers to assist in reducing repetitive bad practice which includes malpractice, not being fit for the
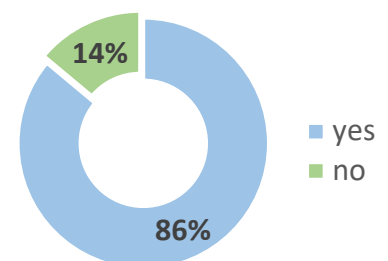
Figure IV. 14 Does your work life affect your health and wellbeing

occupation and carrying out *skills outside the remit of training. This can be observed in Figure IV.15.*
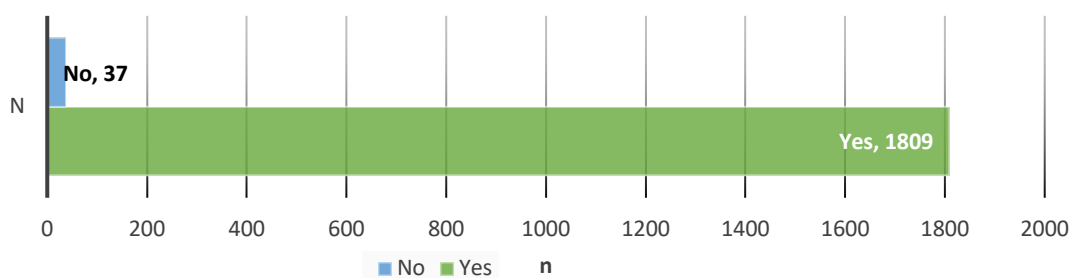
Figure IV. 15 Should there be a Licence System set up for all HCAs and Qualified Carers to Stop Repetitive Bad Practice

Part D: Breakdown of Study Population

Due to the variability of sectors within healthcare, it is important to look at different sectors in which study respondents are employed. As mentioned in Chapter 3 (Methodology); sectors within this study were split into five different groups which include:

A. Public Sector Workers;
B. Private Sector Workers;
C. Public Funded Private Sector Workers;
D. Charity Organisation Workers
E. Agency Sector Workers.

The Agency Sector is not included within the Private sector due to the variability of settings in which workers are employed on ad-hoc locum bases. For a greater understanding of how diverse the HCA Sectors are, frequency tables have been produced for the following care settings: Hospitals; Nursing Homes; Home Care; Intellectual Disability Care and Mental Health Care Services Settings.

Table IV. 4 Sector Distribution by Care Setting

	Hospital		Nursing Home		Home Care		ID Care		Mental Health	
	n=334		n=667		n=841		n=293		n=84	
	n	(%)	n	(%)	n	(%)	N	(%)	n	(%)
Public	96*	(28.8)	197*	(29.5)	189*	(22.5)	81*	(27.6)	32*	(38.1)
Private	119*	(35.6)	254*	(38.1)	238*	(28.3)	56*	(19.1)	17*	(20.2)
PFP♦	28*	(8.3)	68*	(10.2)	115*	(13.7)	65*	(22.2)	3*	(3.6)
Charity	18*	(5.4)			43*	(5.1)	38*	(13.0)	1*	(1.2)
Agency	73*	(21.9)	148*	(22.2)	256*	(30.4)	53*	(18.1)	31*	(36.9)

♦ Public Funded Private
*Total greater than study sample due to carers working in more than one setting.

Section II

Comparative Statistics
by Setting

Tests of Association

Table IV.5 represents associations between care settings and a variety of variables which include skills trained or practiced; career characteristics and issues relating to the occupation.

This analysis examined the association between the care setting: **Hospital** and response to a variety of questions. Two statistically significant associations were found; results of the analysis are presented in Table IV.5. There was a significant association between care setting Hospital and the question: does

Table IV. 5 Association of Skills, Issues and Career Characteristics by Setting

	Hospital		
	Yes **n (%)**	**No** **n (%)**	**p-value**
Employer Help or Hinder You (n=1812)			
Hinder	136 (45.5)	594 (32.8)	**0.05**
Help	163 (54.5)	919 (50.7)	
Skills Practice IV Access (n=1846)			
Yes	11 (3.6)	8 (0.5)	**<0.001ᵃ**
No	295 (96.4)	1532 (99.5)	
	Home Care		
	Yes **n (%)**	**No** **n (%)**	**p-value**
Full Award (n =1846)			
Yes	570 (76.4)	981 (89.2)	**<0.001**
No	176 (23.6)	119 (10.8)	
Employer Help or Hinder You (n=1812)			
Hinder	255 (34.7)	475 (44.1)	**<0.001**
Help	480 (65.3)	602 (55.9)	
WE*: Health & Wellbeing (n=1823)			
Yes	652 (87.3)	1005 (91.3)	**<0.006**
No	94 (12.7)	95 (8.7)	
Listened to by Management (n=1846)			
Yes	401 (53.7)	496 (45.1)	**<0.001**
No	345 (46.3)	604 (54.9)	
Issues: Staffing Levels (n=1846)			
Yes	506 (67.5)	976 (88.7)	**<0.001**
No	240 (32.5)	124 (11.3)	
Issues : Travelling (Fees)(n=1846)			
Yes	551 (73.8)	222 (79.8)	**<0.001**
No	195 (26.2)	878 (20.2)	

[a]: Fisher's Exact Test
WE* : Work Effects

your employer help or hinder your practice *(p=0.05)*. Specifically, a significantly higher proportion of respondents who do work in a hospital setting believed that their employer hindered their practice as compared to those who do not work in a hospital. There was a highly significant association between Care Setting Hospital and Skills practice – IV Access *(p<0.001)*. Specifically, a significantly higher proportion of those who work in a hospital setting practice intravenous access in their role compared to those not working in hospital settings.

This analysis (Table IV.5) examined the association between care Setting: **Home Care** and a variety of variables. There were a number of statistically significant associations between the care setting of home care and a variety of variable. There was a statistically significant association between care setting home care and the question 'Full award' *(p<0.001)*. Specifically, a significantly lower proportion of those working in home care had acquired a full award (76.4%) compared to those who did not work in home care (89.2%). There was a statistically significant association between those who worked in home care and the question 'listened to by management', (p<0.001). Specifically, a significantly higher proportion of those

who work in home care was listened to by management (53.7%) as compared to those who do not work in home care (45.1%).

Table IV. 6 Association of Skills, Issues and Career Characteristics by Setting Cont'd

Table IV.6 is a continuation table of Table IV.5. There was a highly significant association between skill practice: IV access and nursing home care setting', (p<0.001). A significantly higher proportion of nursing home workers have practised IV access compared to other Care Settings.

	Nursing Home		
Skills Practice IV Access (n=1846)	**Yes n (%)**	**No n (%)**	**p-value**
Yes	15 (2.4)	4 (0.5)	**<0.001ª**
No	614 (97.6)	1213 (99.5)	
	Day Care Centre		
Full Award Pay (n=1845)	**Yes n (%)**	**No n (%)**	**p-value**
Yes	67 (97.1)	1521 (85.6)	**<0.01ª**
No	2 (2.9)	255 (14.4)	
	Charity Organisations		
Licence National (n=1846)	**Yes n (%)**	**No n (%)**	**p-value**
Yes	61 (93.8)	1748 (98.1)	**0.04ª**
No	4 (6.2)	33 (1.9)	
	Hospice		
Senior HCA (n=1846)	**Yes n (%)**	**No n (%)**	**p-value**
Yes	13 (76.4)	736 (40.3)	**<0.01ª**
No	4 (23.6)	1093 (59.7)	
Issues Travelling (Fees) (n=1846)			
Yes	3 (17.7)	770 (42.1)	**0.05ª**
No	14 (82.3)	1059 (57.9)	
Issues Min. Wages (n=1846)			
Yes	4 (23.6)	1065 (58.2)	**<0.01ª**
No	13 (76.4)	764 (41.8)	

a : Fisher's Exact Test

There was a significant association between full award pay and those working in day care centres,(p<0.01). A higher proportion of day care centre workers believe that those with full awards should be paid more than those without full awards as compared to other care setting areas. There was a statistically significant association between national licence and those who work in charity organisation', (p=0.04). Specifically, a lower proportion of charity association HCAs did not want a national licence system in place as compared to those in other care settings.

There was a very significant association between issues regarding low wages by those who work in Hospice care', (p<0.01). A significantly lower proportion of hospice HCAs believe that there are issues regarding low wages than those within other care settings.

Table IV.7 is a continuation of Table IV.5-6. There was a highly statistically significant association between a full award and Intellectual Disability Care HCAs [Table IV.6] (p<0.001). A significantly bigger proportion of the population noted they were working with a full award as compared to other care settings and areas.

There was a highly statistically significant association between issues regarding staffing levels and Intellectual disability care settings', (p<0.001). A significantly higher proportion of Intellectual disability care HCAs have an issue with staffing levels compared to other areas.

There was a highly statistically significant association between issues regarding low wages and those working in intellectual disability care', (p<0.001). A significantly lower proportion of Intellectual disability care HCAs have issues with low wages compared to other areas.

Table IV. 7 Association of Skills, Issues and Career Characteristics by Setting Cont'd

	Intellectual Disabilities		
Employer Opportunities to Upskill (n=1846)	**Yes** n (%)	**No** n (%)	**p-value**
Yes	178 (70.3)	960 (60.2)	**<0.01**
No	75 (29.7)	633 (39.8)	
Full Award (n=1846)			
Yes	233 (92.0)	1318 (82.7)	**<0.001**
No	20 (8.0)	275 (17.3)	
Employer Help or Hinder (n=1812)			
Hinder	115 (46.8)	615 (39.3)	**0.03**
Help	131 (53.2)	951 (60.7)	
Issues Staffing Levels (n=1846)			
Yes	225 (88.9)	1257 (78.9)	**<0.001**
No	28 (11.1)	336 (21.1)	
Issues Travelling (Fees) (n=1846)			
Yes	84 (11.1)	689 (43.3)	**<0.01**
No	169 (88.9)	904 (56.7)	
Issues Wages (Min Wages)(n= 1846)			
Yes	122 (48.3)	947 (59.4)	**<0.001**
No	131 (51.7)	646 (40.6)	
	Addiction Services		
	Yes n (%)	**No** n (%)	**p-value**
WE* Health & Wellbeing (n=1846)			
Yes	4 (57.1)	1653 (89.8)	**0.04**
No	3 (42.9)	186 (10.2)	
	Mental Health		
	Yes n (%)	**No** n (%)	**p-value**
Full Award (n=1846)			
Yes	60 (93.7)	1491 (83.6)	**0.04[a]**
No	4 (6.3)	291 (16.4)	

a: Fisher's Exact Test
WE* : Work Effects

Logistic Regression

The Results found in Table IV.8 represent a logistic regression carried out to observe all care settings regarding unhelpful managers, employers and companies (Employer: Help or Hinder) with data available for use within the analysis. The regression observed three statistically significant findings.

Private Hospital HCAs are nearly 2 times more likely to be hindered by unhelpful management than other settings. The 95% confidence interval for the odds ratio comparing private hospital HCAs and other HCA setting groups who believe they are hindered in practice is (1.18 to 3.09).

Private home care HCAs are 28% less likely to be hindered by unhelpful management compared to other care setting groups. The 95% confidence interval for the odds ratio comparing private home care and other HCA setting groups is (0.56 to 0.94).

Private Intellectual disability care HCAs are nearly 2 times more likely to be hindered by unhelpful management than other settings. The 95% confidence interval for the odds ratio comparing private intellectual disability care HCAs and other setting groups is (1.23 to 2.70).

Table IV. 8 Results of Logistic Regression of Care Settings and Unhelpful Managers /Employers /Companies.

Independent Variables: Care Settings	B	S.E	Wald	df	p-Value	OR (Exp B)	CI (95%)
Public Hospital	.046	.225	.041	1	.839	1.047	0.67-1.62
Private Hospital	.649	.245	7.031	1	**0.008****	1.913	1.18-3.09
Public Nursing Home	.079	.216	.134	1	.714	1.082	0.71-1.65
Private Nursing Home	.234	.166	2.000	1	.157	1.264	0.91-1.75
Public Home care	-.183	.373	.240	1	.624	.833	0.40-1.73
Private Home care	-.323	.134	5.858	1	**0.015****	.724	0.56-0.94
Public Mental Health Service	.221	.384	.330	1	.565	1.247	0.59-2.65
Private Mental Health Service	.399	.529	.567	1	.451	1.490	0.53-4.20
Public Intellectual Disability Care	.086	.240	.129	1	.720	1.090	0.68-1.74
Private Intellectual Disability Care	.600	.201	8.944	1	**0.002****	1.822	1.23-2.70
Constant	-.470	.063	56.570	1	**<0.001*****	.625	

df: Degrees of Freedom, OR (Exp B): Odds Ratio, CI (95%): Confidence Interval at 95%, S.E.: Standard Error;
-2log Likelihood = 2406.93; Cox & Snell R Square = 0.020; Magelkerke R Square = 0.027

Section III
Descriptive Statistics
Trained Skills
and Skills Used in Practice

Descriptive Statistics of Skills

The full sample of this study included 1846 respondents; who below in Table IV.9 answered dichotomous questions regarding Skills in which they had attained.

Table IV. 9 Descriptive Frequency of Trained Skills of Entire Study Population

Skill: Trained (n=1846)	N	(%)
Carers Note	918	(49.7)
Observation	660	(35.8)
IV Care	207	(11.2)
IV Access	49	(2.7)
Fluid Balance	763	(41.3)
Medication Administration	363	(19.7)
Physical Examination & Critical Care	334	(18.1)
Activities of Daily Living	1418	(76.8)
Dementia Care	866	(46.9)
Palliative Care	769	(41.7)
Diabetes Care	349	(18.9)
Epilepsy Care	331	(17.9)
Pre & Post-Operative Care	142	(7.7)
Intellectual Disabilities Care	622	(33.7)
Physical Disabilities Care	464	(25.1)
Addiction Care	113	(6.1)
Mental Health Care	432	(23.4)
Life Skills	605	(32.8)
Driving	546	(29.6)
Any Other Specialist Training	199	(10.8)

The **most** common skills that the study population trained include activities of daily living (76.8%) was the most trained in skill; carers notation (49.7%); dementia care (46.9%); palliative care (41.7%) and fluid balance (41.3%) were noted as being the skills which followed the most trained in skill.

The **least** common skills noted in this frequency include intravenous access (2.7%); addiction care skills (6.1%) and pre / post-operative care (7.7%).

Table IV.10 Descriptive Frequency of Skills in Practice of Entire Study Population

Skill: In Practice (n=1846)	n	(%)
Carers Note	1200	(65.0)
Observation	454	(24.6)
IV Care	243	(13.2)
IV Access	19	(1.0)
Fluid Balance	803	(43.5)
Medication Administration	367	(19.9)
Physical Examination & Critical Care	299	(16.2)
Activities of Daily Living	1427	(77.3)
Dementia Care	753	(40.8)
Palliative Care	624	(33.8)
Diabetes Care	371	(20.1)
Epilepsy Care	305	(16.5)
Pre & Post-Operative Care	175	(9.5)
Intellectual Disabilities Care	571	(30.9)
Physical Disabilities Care	510	(27.6)
Addiction Care	83	(4.5)
Mental Health Care	451	(24.4)
Life Skills	555	(30.1)
Driving	603	(32.7)
Any Other Specialist Training	163	(8.8)

Table IV.10 observed answers regarding skills which respondents' practice on a day to day basis.

The **most** common skills in practice by the study population include activities of daily living (77.3%); carers notation (65.0%); fluid balance (43.5%) and dementia care (40.8). The **least** practiced skills include intravenous access (1.0%); addiction care (4.5%); other specialist training (8.8%) and pre / post-operative care (9.5%).

Section IV
Comparative Descriptive Statistics of Trained Skills and Skills Used in Practice by Setting

Public Hospital

Table IV.11 Comparative Frequency of Public Hospital HCA Skill Set

Setting: Public Hospital (n=186)	Trained		In Practice	
Skills	**n**	**(%)**	**n**	**(%)**
Carers Note	91	(48.9)	116	(62.4)
Observation	88	(47.3)	54	(29.0)
IV Care	24	(12.9)	61	(32.8)
IV Access	4	(2.2)	8	(4.3)
Fluid Balance	76	(40.9)	165	(88.7)
Medication Administration	32	(17.2)	98	(52.7)
Physical Examination & Critical Care	32	(17.2)	97	(52.2)
Activities of Daily Living	14	(75.3)	163	(87.6)
Dementia Care	82	(44.1)	100	(53.8)
Palliative Care	70	(37.6)	92	(49.5)
Diabetes Care	30	(16.1)	64	(34.4)
Epilepsy Care	30	(16.1)	60	(32.3)
Pre & Post-Operative Care	13	(7.0)	40	(21.5)
Intellectual Disabilities Care	57	(30.6)	92	(49.5)
Physical Disabilities Care	40	(21.5)	74	(39.8)
Addiction Care	12	(6.5)	18	(9.7)
Mental Health Care	34	(18.3)	81	(43.5)
Life Skills	61	(32.8)	86	(46.2)
Driving	51	(27.4)	83	(44.6)
Any Other Specialist Training	19	(10.2)	34	(18.3)

Table IV.11 represents differences in skills learned and in practice within the public hospital HCA group. The **most** common trained skills include Activities of daily living (75.3%); Carers notation (48.9%); Clinical Observation (47.3%) and Dementia Care (44.1%). The **least** common skill was IV access (2.2%) The most common skills in practice include Fluid balance (88.7%); Activities of daily living (87.6%); Carers notation (62.4%) and Dementia care (53.8%). IV access was the least practised skill (4.3%).

Private Hospital

Table IV.12 Comparative Frequency of Private Hospital HCA Skill Set

Setting: Private Hospital (n=119)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	63	(52.9)	89	(74.8)
Observation	40	(33.6)	19	(16.0)
IV Care	8	(6.7)	38	(31.9)
IV Access	2	(1.7)	3	(2.5)
Fluid Balance	49	(41.2)	104	(87.4)
Medication Administration	19	(15.1)	66	(55.5)
Physical Examination & Critical Care	25	(21.0)	67	(56.3)
Activities of Daily Living	93	(78.2)	109	(91.6)
Dementia Care	51	(42.9)	62	(52.1)
Palliative Care	51	(42.9)	55	(46.2)
Diabetes Care	17	(14.3)	53	(44.5)
Epilepsy Care	8	(6.7)	45	(37.8)
Pre & Post-Operative Care	7	(5.9)	21	(17.6)
Intellectual Disabilities Care	21	(17.6)	54	(45.4)
Physical Disabilities Care	21	(17.6)	51	(42.9)
Addiction Care	1	(0.8)	10	(8.4)
Mental Health Care	30	(25.2)	52	(43.7)
Life Skills	29	(24.4)	57	(47.9)
Driving	27	(22.7)	49	(41.2)
Any Other Specialist Training	8	(6.7)	21	(17.6)

Table IV.12 presents differences in skills learned and skills in practice within the private hospital HCA group. The **most** common skill learned was Activities of daily living (78.2%); Carers notation (52.9%); Palliative care and Dementia care both weighed 42.9% of skills learned. Addiction care (0.8%) was the **least** trained in the skill.

The **most** common skills in practice include Activities of daily living (91.6%); Fluid balance (87.4%); Carers notation (74.8%) and Physical examination / Critical Care (56.3%). IV Access (2.5%) was the **least** practice skill.

Public Nursing Home

Table IV.13 Comparative Frequency of Public Nursing Home HCA Skill Set

Setting: Public Nursing Home (n=197)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	86	(43.7)	109	(55.3)
Observation	103	(52.3)	75	(38.1)
IV Care	19	(9.6)	44	(22.3)
IV Access	4	(2.0)	5	(2.5)
Fluid Balance	103	(52.3)	151	(76.6)
Medication Administration	32	(16.2)	78	(39.6)
Physical Examination & Critical Care	35	(17.8)	66	(33.5)
Activities of Daily Living	142	(72.1)	181	(91.9)
Dementia Care	97	(49.2)	105	(53.3)
Palliative Care	86	(43.7)	88	(44.7)
Diabetes Care	38	(19.3)	63	(32.0)
Epilepsy Care	32	(16.2)	49	(24.9)
Pre & Post-Operative Care	20	(10.2)	43	(21.8)
Intellectual Disabilities Care	59	(29.9)	88	(44.7)
Physical Disabilities Care	46	(23.4)	77	(39.1)
Addiction Care	13	(6.6)	10	(5.1)
Mental Health Care	35	(17.8)	73	(37.1)
Life Skills	58	(29.4)	78	(36.9)
Driving	51	(25.9)	75	(38.1)
Any Other Specialist Training	21	(10.7)	23	(11.7)

Table IV.13 presents differences in skills learned and in practice within the public nursing home HCAs. The **mos**t common trained skills include Activities of daily living (72.1%); clinical observations and fluid balance (both 52.3%) with Dementia care (49.2%). The **least** common skill was IV access (2.0%). The **most** common skills in practice include activities of daily living (91.9%); Fluid balance (76.6%); Carers notation (55.3%) and Dementia care (53.5%). IV access was the **least** practised skill (2.5).

Private Nursing Home

Table IV.14 Comparative Frequency of Private Nursing Home HCA Skill Set

Setting: Private Nursing Home (n=310)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	117	(57.1)	227	(73.2)
Observation	103	(33.2)	61	(19.7)
IV Care	29	(9.4)	67	(21.6)
IV Access	7	(2.3)	8	(2.6)
Fluid Balance	125	(40.3)	239	(77.1)
Medication Administration	54	(17.4)	128	(41.3)
Physical Examination & Critical Care	66	(21.3)	121	(39.0)
Activities of Daily Living	237	(76.5)	283	(91.3)
Dementia Care	136	(43.9)	188	(60.6)
Palliative Care	126	(40.6)	157	(50.6)
Diabetes Care	60	(19.4)	101	(32.6)
Epilepsy Care	47	(15.2)	90	(29.0)
Pre & Post-Operative Care	24	(7.7)	38	(12.3)
Intellectual Disabilities Care	91	(29.4)	128	(41.3)
Physical Disabilities Care	77	(24.8)	111	(35.8)
Addiction Care	12	(3.9)	24	(7.7)
Mental Health Care	78	(25.2)	112	(36.1)
Life Skills	90	(29.0)	135	(43.5)
Driving	94	(30.3)	120	(38.7)
Any Other Specialist Training	34	(11.0)	52	(16.8)

Table IV.14 presents differences in skills learned and skills practised within the private nursing home HCA group. The **most** common learned skills include Activities of daily living (76.5%); Carers notation (57.1%); Dementia care (43.9%) and Palliative care (40.6%). IV access was the **least** trained skill (2.3%).

The **most** common skills in practice include Activities of daily living (91.3%); Fluid balance (77.1%); Carers notation (73.2%) and Dementia Care (60.6%). IV access (2.6%) and Addiction care (7.7%) were the **least** practised skills.

Public Home Care

Table IV.15 Comparative Frequency of Public Home Care HCA Skill Set

Setting: Public Home Care (n=96)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	40	(41.7)	48	(50.0)
Observation	55	(57.3)	37	(38.5)
IV Care	10	(10.4)	31	(32.3)
IV Access	1	(1.0)	4	(4.2)
Fluid Balance	52	(54.2)	83	(86.5)
Medication Administration	15	(15.6)	49	(51.0)
Physical Examination & Critical Care	19	(19.8)	46	(47.9)
Activities of Daily Living	70	(72.9)	88	(91.7)
Dementia Care	44	(45.8)	54	(56.3)
Palliative Care	35	(36.5)	42	(43.8)
Diabetes Care	14	(14.6)	31	(32.3)
Epilepsy Care	15	(15.6)	28	(29.2)
Pre & Post-Operative Care	9	(9.4)	28	(29.2)
Intellectual Disabilities Care	27	(28.1)	8	(25.0)
Physical Disabilities Care	15	(15.6)	39	(40.6)
Addiction Care	5	(5.2)	6	(6.3)
Mental Health Care	14	(14.6)	42	(43.8)
Life Skills	25	(26.0)	39	(40.6)
Driving	21	(21.9)	39	(40.6)
Any Other Specialist Training	10	(10.4)	16	(16.7)

Table IV. 15 presents differences in skills learned and skills in practice within the public home care HCA group. The **most** common trained skills include Activities of Daily Living (72.9%); Clinical observation (57.3%); Fluid balance (54.2%) and Carers notation (41.7%). IV access (1.0%) was the **least** trained in the skill. The **most** common skills in practice include Activities of daily living (91.7%); Fluid balance (86.5%); Dementia care (56.3%) Medication administration (51.0%); and Carers notation (50.0%). IV access (4.2%) and Addiction care (6.3%) were the **least** practised skills

Private Home Care

Table IV.16 Comparative Frequency of Private Home Care HCA Skill Set

Setting: Private Home Care (n=339)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	195	(57.5)	237	(69.9)
Observation	88	(26.0)	36	(10.6)
IV Care	45	(13.3)	52	(15.3)
IV Access	9	(2.7)	4	(1.2)
Fluid Balance	96	(28.3)	143	(42.2)
Medication Administration	75	(22.1)	83	(24.5)
Physical Examination & Critical Care	65	(19.2)	63	(18.6)
Activities of Daily Living	267	(78.8)	256	(75.5)
Dementia Care	158	(46.6)	140	(41.3)
Palliative Care	123	(36.3)	119	(35.1)
Diabetes Care	66	(19.5)	67	(19.8)
Epilepsy Care	58	(17.1)	72	(21.2)
Pre & Post-Operative Care	28	(8.3)	25	(7.4)
Intellectual Disabilities Care	102	(30.1)	107	(31.6)
Physical Disabilities Care	99	(29.2)	93	(27.4)
Addiction Care	20	(5.9)	16	(4.7)
Mental Health Care	76	(22.4)	88	(26.0)
Life Skills	113	(33.3)	102	(30.1)
Driving	143	(42.2)	121	(35.7)
Any Other Specialist Training	31	(9.1)	39	(11.5)

Table IV.16 presents differences in skills learned and in practice within the private home care HCA group. The **most** common trained skills include Activities of daily living (78.8%); Carers notation (57.5%); Dementia Care (46.6%); and Driving (42.2%). IV access (2.7%) was **least** trained in. The **most** common skills in practice include Activities of daily living (75.5%); Carers notation (69.9%) and Fluid balance (42.2%). IV Access was the **least** practised

skill (1.2%)

Public Intellectual Disability Care

Table IV.17 Comparative Frequency of Public I.D Care HCA Skill Set

Setting: Public I.D. Care (n=81)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	44	(54.3)	64	(79.0)
Observation	39	(48.1)	42	(51.9)
IV Care	7	(8.6)	8	(9.9)
IV Access	1	(1.2)		
Fluid Balance	41	(50.6)	31	(38.3)
Medication Administration	42	(51.9)	10	(12.3)
Physical Examination & Critical Care	14	(17.3)	12	(14.8)
Activities of Daily Living	65	(80.2)	61	(75.3)
Dementia Care	30	(37.0)	29	(35.8)
Palliative Care	25	(30.9)	26	(32.1)
Diabetes Care	22	(27.2)	15	(18.5)
Epilepsy Care	50	(61.7)	12	(14.8)
Pre & Post-Operative Care	2	(2.5)	6	(7.4)
Intellectual Disabilities Care	72	(88.9)	28	(34.6)
Physical Disabilities Care	36	(44.4)	22	(27.2)
Addiction Care	8	(9.9)	1	(1.2)
Mental Health Care	34	(42.0)	16	(19.8)
Life Skills	40	(49.4)	22	(27.2)
Driving	44	(54.3)	31	(38.3)
Any Other Specialist Training	18	(22.2)	5	(6.2)

Table IV.17 presents differences in skills learned and skills in practice within the public intellectual disability HCA group. The **most** common trained skills include Intellectual disability care (88.9%); Activities of daily living (80.2%); Epilepsy care (61.7%); and Carers notation and Driving (54.3%). The **least** trained skill was IV access (1.2%).

Most common skills in practice include Carers notation (79.0%); Activities of daily living (75.3%) and clinical observation (51.9%). No practice of IV access is found within this group. Addiction care (1.2%) was the **least** skill in practice.

Private Intellectual Disability Care

Table IV.18 Comparative Frequency of Private I.D Care HCA Skill Set

Setting: Private I.D. Care (n=116)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	71	(61.2)	94	(81.0)
Observation	49	(42.2)	55	(47.4)
IV Care	10	(8.6)	13	(11.2)
IV Access	2	(1.7)		
Fluid Balance	47	(40.5)	46	(39.7)
Medication Administration	74	(63.8)	21	(18.1)
Physical Examination & Critical Care	24	(20.7)	13	(11.2)
Activities of Daily Living	94	(81.0)	84	(72.4)
Dementia Care	45	(38.8)	35	(30.2)
Palliative Care	42	(36.2)	32	(27.6)
Diabetes Care	41	(35.3)	11	(9.5)
Epilepsy Care	73	(62.9)	11	(9.5)
Pre & Post-Operative Care	3	(2.6)	4	(3.4)
Intellectual Disabilities Care	95	(81.9)	24	(20.7)
Physical Disabilities Care	55	(47.4)	19	(16.4)
Addiction Care	15	(12.9)	4	(3.4)
Mental Health Care	55	(47.4)	19	(16.4)
Life Skills	58	(50.0)	29	(25.0)
Driving	64	(55.2)	29	(25.0)
Any Other Specialist Training	31	(26.7)	7	(6.0)

Table IV.18 presents differences in skills learned and skills in practice in the private intellectual disability HCA group. The most common trained skills include Intellectual disability care (81.9%); Activities of daily living (81.0%); Epilepsy care (62.9%); Medication administration (63.8%) and Carers notation (61.2%). The **least** trained skill was IV access (1.7%). The **most** common skills in practice include Carers notation (81.0%); Activities of daily living (72.4%) and Clinical observation (47.4%). No practice of IV access is found within this group. Addiction care (3.4%) was the **least** skill in practice.

Public Mental Health Care

Table IV.19 Comparative Frequency of Public Mental Health Care HCA Skill Set

Setting: Public MH. Care (n=32)	Trained n	Trained (%)	In Practice n	In Practice (%)
Carers Note	15	(46.9)	16	(50.0)
Observation	16	(50.0)	9	(28.1)
IV Care	6	(18.8)	3	(9.4)
IV Access				
Fluid Balance	17	(53.1)	11	(34.4)
Medication Administration	7	(21.9)	3	(9.4)
Physical Examination & Critical Care	4	(12.5)	6	(18.8)
Activities of Daily Living	28	(87.5)	26	(81.3)
Dementia Care	17	(53.1)	10	(31.3)
Palliative Care	16	(50.0)	9	(28.1)
Diabetes Care	9	(28.1)	5	(15.6)
Epilepsy Care	9	(28.1)	1	(3.1)
Pre & Post-Operative Care	4	(12.5)	2	(6.3)
Intellectual Disabilities Care	17	(53.1)	8	(25.0)
Physical Disabilities Care	14	(43.8)	5	(15.6)
Addiction Care	7	(21.9)	1	(3.1)
Mental Health Care	26	(81.3)	10	(31.3)
Life Skills	16	(50.0)	8	(25.0)
Driving	11	(34.4)	6	(18.8)
Any Other Specialist Training	2	(6.3)	3	(9.4)

Table IV.19 presents differences in skills learned and skills in practice within the public mental health care HCA group. The **most** common trained skills include activities of daily living (87.5%); mental health care (81.3%) and dementia care and intellectual disability care (53.1%). No skills in IV access was noted in this group. 'Other specialist training' (6.3%) was **least** noted.

The **most** common skills in practice include activities of daily living (81.3%); carers notation (50.0%) and fluid balance (34.4%). **Least** practised skills include epilepsy care and addiction care (3.1%).

Private Mental Health Care

Table IV.20 Comparative Frequency of Private Mental Health Care HCA Skill Set

Setting: Private MH. Care (n=17)	Trained n	Trained (%)	In Practice n	In Practice (%)
Carers Note	11	(64.7)	14	(82.4)
Observation	11	(64.7)	9	(52.9)
IV Care	4	(23.5)	4	(23.5)
IV Access	2	(11.8)		
Fluid Balance	12	(70.6)	4	(23.5)
Medication Administration	6	(35.3)	4	(23.5)
Physical Examination & Critical Care	6	(35.3)	3	(17.6)
Activities of Daily Living	16	(94.1)	13	(76.5)
Dementia Care	12	(70.6)	4	(23.5)
Palliative Care	10	(58.8)	6	(35.3)
Diabetes Care	7	(41.2)	1	(5.9)
Epilepsy Care	5	(29.4)	1	(5.9)
Pre & Post-Operative Care	4	(23.5)	1	(5.9)
Intellectual Disabilities Care	10	(58.8)	2	(11.8)
Physical Disabilities Care	10	(58.8)	1	(5.9)
Addiction Care	3	(17.6)		
Mental Health Care	14	(82.4)	4	(23.5)
Life Skills	10	(58.8)	6	(35.3)
Driving	7	(41.2)	4	(23.5)
Any Other Specialist Training	2	(11.8)	1	(5.9)

Table IV.20 presents differences in skills learned and skills in practice within the private mental health care HCA group. The **most** common trained skills include Activities of daily living (94.1%); Mental health care (82.4%); Dementia care and Fluid balance (70.6%). IV Access (11.8%) was the **least** trained skill.

The **most** common skills in practice include Carers notation (82.4%); Activities of daily living (76.5%) and clinical observation (53.9%). No practice of IV access or Addiction care skills were noted.

Day Care Centre

Table IV.21 Comparative Frequency of Day Care Centre HCA Skill Set

Setting: Day Care Centre (n=69)	Trained		In Practice	
Skill	**n**	**(%)**	**N**	**(%)**
Carers Note	31	(44.9)	46	(66.7)
Observation	23	(33.3)	18	(26.1)
IV Care	7	(10.1)	7	(10.1)
IV Access				
Fluid Balance	25	(36.2)	34	(49.3)
Medication Administration	13	(18.8)	13	(18.8)
Physical Examination & Critical Care	7	(10.1)	10	(14.5)
Activities of Daily Living	53	(76.8)	58	(84.1)
Dementia Care	35	(50.7)	31	(44.9)
Palliative Care	31	(44.9)	19	(27.5)
Diabetes Care	12	(17.4)	14	(20.3)
Epilepsy Care	11	(15.9)	6	(8.7)
Pre & Post-Operative Care	2	(2.9)	7	(10.1)
Intellectual Disabilities Care	31	(44.9)	21	(30.4)
Physical Disabilities Care	24	(34.8)	21	(30.4)
Addiction Care	3	(4.3)	4	(5.8)
Mental Health Care	22	(31.9)	19	(27.5)
Life Skills	26	(37.7)	15	(21.7)
Driving	17	(24.6)	12	(17.4)
Any Other Specialist Training	5	(7.2)	9	(13.0)

Table IV.21 presents differences in skills learned and skills in practice within the day care centre HCA group. The **most** common trained skills include Activities of daily living (76.8%); Dementia care (50.7%) with Carers notation, Palliative care and Intellectual disability care (44.9%). Pre and post-operative care were the **least** trained in the skill. Skills **most** in practice include activities of daily living (84.1%); Carers notation (66.7%) and Fluid balance (49.3%). No IV Access skills were noted. Addiction care (5.8%) was the **least** practised.

Hospice Care

Table IV.22 Comparative Frequency of Hospice Care HCA Skill Set

Setting: Hospice Care (n=17)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	9	(52.9)	11	(64.7)
Observation	12	(70.6)	10	(58.8)
IV Care	2	(11.8)	2	(11.8)
IV Access	1	(5.9)		
Fluid Balance	7	(41.2)	6	(35.3)
Medication Administration	3	(17.6)	1	(5.9)
Physical Examination & Critical Care	2	(11.8)	3	(17.6)
Activities of Daily Living	14	(82.4)	14	(82.4)
Dementia Care	10	(58.8)	13	(76.5)
Palliative Care	13	(76.5)	5	(29.4)
Diabetes Care	6	(35.3)	1	(5.9)
Epilepsy Care	3	(17.6)	3	(17.6)
Pre & Post-Operative Care	4	(23.5)	2	(11.8)
Intellectual Disabilities Care	10	(58.8)	6	(35.3)
Physical Disabilities Care	7	(41.2)	5	(29.4)
Addiction Care	3	(17.6)		
Mental Health Care	8	(47.1)	6	(35.3)
Life Skills	9	(52.9)	4	(23.5)
Driving	4	(23.5)	3	(17.6)
Any Other Specialist Training	3	(17.6)		

Table IV.22 shows differences in skills learned and in practice within the hospice care HCA group. The **most** common trained skills include Activities of daily living (82.4%); Palliative care (76.5%); Clinical observation (70.6%); Intellectual disability care and Dementia care (58.8%). IV Access (5.9%) was **leased** noted. The **most** common skills in practice include Activities of daily living (82.4%); Dementia care (76.5%); Carers Notation (64.7%) and Clinical observation (58.8%). Diabetes care and Medication administration were the **least** practised (5.9).

Clinic

Table IV.23 Comparative Frequency of Clinic HCA Skill Set

Setting: Clinic (n=7)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	4	(57.1)	7	(100)
Observation	2	(28.6)	4	(57.1)
IV Care			1	(14.3)
IV Access	1	(14.3)	1	(14.3)
Fluid Balance	4	(57.1)	4	(57.1)
Medication Administration	3	(42.9)	3	(42.9)
Physical Examination & Critical Care	2	(28.6)	1	(14.3)
Activities of Daily Living	5	(71.4)	5	(71.4)
Dementia Care	1	(14.3)	3	(42.9)
Palliative Care	2	(28.6)	1	(14.3)
Diabetes Care				
Epilepsy Care	1	(14.3)	1	(14.3)
Pre & Post-Operative Care	1	(14.3)		
Intellectual Disabilities Care			1	(14.3)
Physical Disabilities Care				
Addiction Care				
Mental Health Care	1	(14.3)	1	(14.3)
Life Skills	1	(14.3)	2	(28.6)
Driving			1	(14.3)
Any Other Specialist Training	2	(28.6)		

Table IV.23 shows differences in skills learned and in practice within the clinic HCA group. The following skills were **not found** within the analysis which includes Diabetes care; Physical disability care and Addiction care. The **most** common trained skills include Activities of daily living (71.4%); Clinical observation and Fluid balance (both 57.1%). **Least** common include Epilepsy care; IV Access; Dementia care; Pre and post-operative care; Mental health care and Life skills (all 14.3%).

Most common skills in practice included Carers notation (100%); Activities of daily living (71.4%); Clinical observation and Fluid balance (57.1%).

Addiction Care

Table IV.24 Comparative Frequency of Addiction Care HCA Skill Set

Setting: Addiction Care (n=7)	Trained		In Practice	
Skill	**n**	**(%)**	**n**	**(%)**
Carers Note	2	(28.6)	5	(71.4)
Observation	2	(28.6)	2	(28.6)
IV Care	1	(14.3)	2	(28.6)
IV Access				
Fluid Balance	2	(28.6)	4	(57.1)
Medication Administration	2	(28.6)	1	(14.3)
Physical Examination & Critical Care	1	(14.3)	2	(28.6)
Activities of Daily Living	5	(71.4)	7	(100)
Dementia Care	2	(28.6)	3	(42.9)
Palliative Care	1	(14.3)	4	(57.1)
Diabetes Care	1	(14.3)	1	(14.3)
Epilepsy Care	2	(28.6)		
Pre & Post-Operative Care			2	(28.6)
Intellectual Disabilities Care	2	(28.6)	3	(42.9)
Physical Disabilities Care	2	(28.6)	2	(28.6)
Addiction Care	3	(42.9)		
Mental Health Care	2	(28.6)	3	(42.9)
Life Skills	3	(42.9)	1	(14.3)
Driving	1	(14.3)		
Any Other Specialist Training	2	(28.6)		

Table IV.24 shows differences in skills learned and in practice within the addiction care HCA group. The following skills were **not found** within the analysis which include The skill IV Access. Due to the small sample in this group there are multiple low counts ranging from 14.3 – 28.6%. The **most** common skills in practice include activities of daily living (100%); Carers notation (71.4%); Fluid balance (57.1%) and Palliative care (57.1%). There are multiple **least** in practice skills but due to the low sample size, a bigger sample of addiction care HCAs would be required.

Section V
Comparative Statistics
Care Settings by
Trained Skills

Tests of Association: Trained Skills

The tables in this section include tests of association between observed trained skills of Healthcare Assistants in a variety of care settings. Table IV.25 showcase a selection of full descriptive chi-square tables. Due to the multitude of significant results a summary association table (Table IV. 26) has been presented below presenting Pearson Chi-Square values and p values. For test statistic, degrees of freedom and descriptive tables can be found in Appendix I.

Table IV. 25 Association of Trained Skills by Care Settings

Setting	Skill : Observation		
	Yes	No	
Public Hospital (n=1846)	n (%)	n (%)	p-value
Yes	88 (13.4)	98 (8.3)	**<0.001**
No	572 (86.6)	1088 (91.7)	
Nursing Home Public (n=1846)			
Yes	103 (15.7)	94 (7.0)	**<0.001**
No	557 (84.3)	1092 (92.0)	
Setting	Skill: Fluid Balance Training		
	Yes	No	
Nursing Home Public (n=1846)	n (%)	n (%)	p-value
Yes	103 (13.5)	94 (8.7)	**<0.001**
No	660 (86.5)	989 (91.3)	
Home Care Private (n=1846)			
Yes	96 (12.6)	243 (22.5)	**<0.001**
No	667 (87.4)	840 (77.5)	
Setting	Skill: Medication Administration		
	Yes	No	p-value
ID Care Private (n=1846)	n (%)	n (%)	
Yes	74 (20.4)	42 (2.9)	**<0.001**
No	289 (79.6)	1441 (97.1)	
ID Care Public (n=1846)			
Yes	42 (11.6)	39 (2.7)	**<0.001**
No	321 (88.4)	1444 (97.3)	

A variety of highly statistically significant association between trained skill and care settings can be found in Table IV.25. A highly significant association was found between Clinical Observation and Public hospital HCAs (p<0.001). A lower proportion of public hospital HCAs trained in clinical observation as compared to those not working in public hospitals.

A highly significant association was found between Fluid balance and Public Nursing Home HCAs (p<0.001). A lower proportion of Public Nursing Home HCAs trained in Fluid balance as compared to those not working in public nursing homes.

A highly statistically significant association was found between Medication administration and Private Intellectual Disability Care HCAs (p<0.001). A lower proportion of private intellectual disability care HCAs trained in medication administration as compared to those who do not work in private intellectual disability care.

Table IV. 26 presents a summary table of all associations regarding trained skills between all care settings. In total 59 statistically significant associations were found between 13 different care setting types and 15 different trained skills. Significance level and Pearson Chi-Square value are represented below. Fisher's exact test was used for low sized groups to reduce statistical error. Intellectual disability care presented with the most amount of significant associations; while least associations were found in addiction care and public hospital settings.

Table IV. 26 Summary Associations of Trained Skills by Care Settings

Trained Skills	Public Hospital	Private Hospital	Public Nursing Home	Private Nursing Home	Public Home Care	Private Home Care	Day Care Centre	Area Hospice	Addiction services	ID Care Public	ID Care Private	Mental Health Public	Mental Health Private
Carers Note				p<0.01		p<0.01					p<0.01		
Observation	p<0.001		p<0.001		p<0.001	p<0.001		p<0.01		p<0.05			p<0.05
Fluid Balance			p<0.001		p<0.01	p<0.001							p<0.05[1]
Medication Administration										p<0.001	p<0.001		
Palliative Care						p<0.05[1]		p<0.01[1]		p<0.05			
Diabetes Care											p<0.001		p<0.05[1]
Epilepsy Care		p<0.001								p<0.001	p<0.001		
Pre & Post-Operative Care								p<0.05			p<0.05[1]		p<0.05[1]
Intellectual Disabilities Care		p<0.001					p<0.05	p<0.05[1]		p<0.001	p<0.001	p<0.05	p<0.05
Physical Disabilities Care					p<0.05					p<0.001	p<0.001	p<0.05	p<0.01[1]
Addiction Care		p<0.01[1]							p<0.01[1]	p<0.01	p<0.01		
Mental Health Care			p<0.05					p<0.05[1]		p<0.001	p<0.001	p<0.001[1]	p<0.001[1]
Life Skills		p<0.05								p<0.01	p<0.001[1]	p<0.05	p<0.05[1]
Driving						p<0.001				p<0.001	p<0.001		
Any Other Specialist Training										p<0.01	p<0.001		

Statistical Significance:

p<0.05 = Significant; p<0.01= Very Significant; p<0.001= Highly Significant

[1] Fishers Exact Test

Section VI

Comparative Statistics
Care Settings by
Skills Used in Practice

Tests of Association: Skills in Practice

The tables in this section include tests of association between observed skills in the practice of Healthcare Assistants in a variety of care settings. Table IV.27 showcase a selection of full descriptive chi-square tables. Due to the multitude of significant results a summary association table (Table IV. 28) has been presented below presenting Pearson Chi-Square values and p values. Full descriptive tables which include all significant Pearson Chi-Square results can be found in Appendix I.

Table IV. 27 Association between Skills in Practice and Care Settings

Setting	Yes n (%)	No n (%)	p-value
Setting	**Skill: Carers Note**		
ID Care Private (n=1846)	**Yes** n (%)	**No** n (%)	**p-value**
Yes	94 (7.9)	22 (3.5)	**<0.001**
No	1106 (92.1)	624 (96.5)	
Nursing Home Public (n=1846)			
Yes	103 (16.0)	94 (8.0)	**<0.01**
No	557 (84.0)	1092 (92.0)	
Setting	**Skill: Clinical Observation**		
Nursing Home Public (n=1846)	**Yes** n (%)	**No** n (%)	**p-value**
Yes	75 (16.6)	122 (8.8)	**<0.001**
No	379 (83.4)	1270 (91.2)	
Setting	**Skill: IV Care**		
Hospital Public (n=1846)	**Yes** n (%)	**No** n (%)	**p-value**
Yes	61 (25.2)	125 (7.8)	**<0.001**
No	182 (74.8)	1478 (92.2)	
Nursing Home Private (n=1846)			
Yes	67 (27.6)	243 (14.8)	**<0.001**
No	176 (72.4)	1360 (85.2)	
Setting	**Skill: IV Access**		
Nursing Home Private (n=1846)	**Yes** n (%)	**No** n (%)	**p-value**
Yes	8 (42.2)	302 (16.6)	**<0.01[a]**
No	11 (57.8)	1525 (83.4)	
Hospital Public (n=1846)			
Yes	8 (42.2)	178 (9.8)	**<0.001[a]**
No	11 (57.8)	1649 (90.2)	

a: Fisher's Exact

A variety of highly statistically significant association between skills in practice and care settings can be found in Table IV.27.

This analysis found a highly significant association between Carers notation and private Intellectual disability care (p<0.001). A lower proportion of those in Private Intellectual disability care practised carers notation as compared to those who do not work in Private Intellectual disability care.

A highly statistically significant association was found between Public Nursing home HCAs and Clinical Observation (p<0.001). Specifically, a lower proportion of public nursing home HCAs practised clinical observation as compared to others not working in this setting . A larger proportion of those not working in a public nursing home did not practice clinical observation as compared to those who did.

A highly statistically significant association was found between the skill: IV care and Private nursing home HCAs (p<0.001) [Table IV.27]. Specifically, a lower proportion of practised IV care on a daily basis as compared to the others not working in private nursing homes.

A highly statistically significant association was also found between the public hospital HCA group and IV Access (p<0.001) [Table IV.27]. Specifically, a lower percentage of respondents who are working in the public hospital system use the skill: IV access as compared to other areas.

Table IV. 28 presents a summary table of all associations regarding trained skills between all care settings. In total 110 statistically significant associations were found between 11 different care setting types and 20 different skills reported to be practised on a daily basis. Significance level and Pearson Chi-Square value are represented below. Fisher's exact test was used for low sized groups to reduce statistical error. All Chi-Square analysis presented with on degree of freedom and statistical significance set at 0.05%.

Private hospital and Private Nursing Home settings presented with the highest amount of significant associations both presenting nineteen associations. Public Hospital and Public Home care settings presented with the second-highest distribution of significant associations each presenting eighteen significant associations. Day Care Centre and Private mental health services settings presented with the least number of associations both presenting only one significant association each.

Skills with the highest number of significant associations include Clinical observation which presented nine significant associations between different care settings. The second highest associated skill include Carers Notation; Dementia care and Epilepsy care; which all presented with seven statistically significant associations. Addiction care presented as the least associated skill with care settings only being associated with three care settings.

Table IV. 28 Summary Associations of Skills in Practice and Care Settings

Skills Used in Practice	Public Hospital	Private Hospital	Public Nursing Home	Private Nursing Home	Public Home Care	Private Home Care	Day Care Centre	Area Hospice	ID Care Public	ID Care Private	Mental Health Private
Carers Note		$p < 0.05$	$p < 0.01$	$p < 0.001$	$p < 0.01$	$p < 0.05$			$p < 0.01$	$p < 0.001$	
Observation		$p < 0.05$	$p < 0.001$	$p < 0.05$	$p < 0.01$	$p < 0.001$		$p < 0.01$	$p < 0.001$	$p < 0.001$	$p < 0.05$
IV Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$						
IV Access	$p < 0.001$ [1]		$p < 0.05$	$p < 0.01$ [1]	$p < 0.05$ [1]						
Fluid Balance	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$						
Medication Administration	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.05$					
Physical Examination & Critical Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$						
Activities of Daily Living	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$ [1]						
Dementia Care	$p < 0.001$	$p < 0.01$	$p < 0.001$	$p < 0.001$	$p < 0.01$			$p < 0.01$ [1]		$p < 0.05$	
Palliative Care	$p < 0.001$	$p < 0.01$	$p < 0.001$	$p < 0.001$	$p < 0.05$						
Diabetes Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.01$					$p < 0.01$	
Epilepsy Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.01$				$p < 0.05$	
Pre & Post-Operative Care	$p < 0.001$	$p < 0.01$	$p < 0.001$		$p < 0.001$					$p < 0.05$	
Intellectual Disabilities Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$					$p < 0.01$	
Physical Disabilities Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.01$					$p < 0.01$	
Addiction Care	$p < 0.001$	$p < 0.05$		$p < 0.01$							
Mental Health Care	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$					$p < 0.05$	
Life Skills	$p < 0.001$	$p < 0.001$	$p < 0.01$	$p < 0.001$	$p < 0.05$						
Driving	$p < 0.001$	$P < 0.05$		$p < 0.01$			$p < 0.01$				
Any Other Specialist Training	$p < 0.001$	$p < 0.001$		$p < 0.001$	$p < 0.01$						

Statistical Significance:
$p < 0.05$ = Significant; $p < 0.01$ = Very Significant; $p < 0.001$ = Highly Significant
[1] Fishers Exact Test

Section VII

General Wellbeing Schedule:
Descriptive statistics
Results by Setting

General Wellbeing Schedule: Descriptive Statistics

Table IV.29 presents a descriptive comparative frequency table of all care settings groups by categorised general well-being schedule (GWBS) combined scores. The general wellbeing schedule results are categorised into six levels; each level represents a different level of well-being or destress, that has affected each group. GWBS Category levels below include study population percentage:

- Positive Well-being (Not Distressed)   [40.8%]
- Low Positive Well-being (Minute Stress – Manageable)   [13.4%]
- Marginal Well-being (Irregular Stress – Less Manageable)   [13.2%]
- Stress Problems (Regular Stress)   [25.3%]
- Distress Issues (In Distress)   [6.0%]
- Serious Issues (Most Serious Distress)   [1.4%]

The GWBS as previously noted focuses on subjective feelings of psychological well-being and distress, one's inner personal state. Category results between Positive Well-being and Low Positive Well-being are seen as required levels of wellbeing to be content in all parts of life. Results between Marginal and Stress Problems represent issues which impact on respondents' mental health and life performance. The most serious grouping include Distress Issues and Serious Issues where stress and issues impact on daily living, performance in all areas of life and affect health and mental health.

Table IV.29 look at sixteen different groups; each group is different in relation to practice and the policy which governs them. Superficially, hospice care (76.5%); addiction care (57.1%); private mental health care services (56.9%) and public mental health care service (56.2%) could be reported as being the most positive groups regarding well-being within this study; but we must take into account the size of each group; each valid denominator needs to be observed before any acceptance of any postulation is made from the results below. Therefore, the following results will be observed per care setting.

Note that valid denominators under 15 counts need to be reviewed in light of their smaller number as smaller group numbers may not always be generalisable. Comparisons are made between similar care settings for contextual understanding. For this reason, Clinic HCA and Addiction Care HCA results are not explored due to the small sample sizes (n=7).

Public Hospital Healthcare Assistants:

There were 186 respondents in this group, with the majority of this group presented with positive to marginal well-being with stress being a manageable component within daily life. 44.1% of respondents noted positive well-being; while the second largest group noted this group suffered from 'stress problem (19.3%)',

Private Hospital Healthcare Assistants:

There were 119 respondents in this group, ; the majority of respondents (59.2%) presented with positive to low positive well-being within the past month; Stress problems were the biggest negative well-being category at 30.3% as compared to public hospital Healthcare assistants at 19.3% and this group has the second largest proportion of stress problem within all care settings observed.

Public Nursing Home Healthcare Assistants:

There were 197 respondents in this group, ; 56.8% of this group had observed positive to low positive wellbeing. The biggest negative category for this group were those with a stress problem (22.8%) which had a higher proportion as compared to those with marginal well-being (14.2%).

Private Nursing Home Healthcare Assistants:

This group was observed being the third biggest group within the study population (310 participants). 54.4% presented with positive to low positive well-being. As compared to public nursing home healthcare assistants; those employed within private nursing home care had a lower proportion of positive wellbeing. While pertaining to a higher presentation of stress problem, distress issues and serious issues. These increases may be marginal in percentage form, but it should be noted that groups valid denominators differ by 113 responses and the weighing of cases must be considered.

Public Home care Healthcare Assistants:

There were 96 respondents in this group, ; positive well-being was observed in 41.7% of the group sample, this was the groups largest category with stress problem (21.8%) being observed as second largest for this grouping. Only one case in which a respondent noted severe issues were observed.

Private Home care Healthcare Assistants:

This group presented as the second-largest grouping of Healthcare assistants within this study (339 individuals). 42.5% of this group were observed to have positive well-being for the past month. Lower percentages of lower positive well-being were noted as compared to its public sector being. Similarly, to Private nursing home results, we must be aware of the counts of results as well as the percentage. A higher percentage of this group had marginal well-being to distress issue was observed as compared to public home care grouping. There was a lower percentage of serious issue category respondents but more cases as compared to its public counterpart group.

Agency Healthcare Assistants:

This group was the largest group within the studies population accounting for 351 respondents. 43.1% reported positive well-being; this group had the same frequencies regarding serious issues as Private home care HCA grouping (3 counts/ 0.9%). Largest marginal well-being group (47 counts) found within the entire study population.

Day Care Centre Healthcare Assistants:

This group had 69 respondents which observed 55% who had positive to low positive well-being. 36.2% of the respondents in this group were observed to have a stress problem. This group in comparison with Private home care have the same marginal well-being percentage (13%).

Hospice Care Healthcare Assistants:

This group had 17 respondents; results should be viewed with caution due to the small sample size of this group; which may impact on the generalisability of results. 76.5% reported positive well-being with no cases of marginal wellbeing. 11.8% presented with stress issues.

Charity Organisation Healthcare Assistants:

There were 65 respondents in this group, ; 53.8% of this group presented with positive to low positive wellbeing; 27.7% reported stress problems. Positive wellbeing (41.5%) in this group presented similar findings as public nursing home and home care groups.

Public Intellectual Disability Care Healthcare Assistants:

There were 81 respondents in this group, ; the majority of this group presented with positive to low positive wellbeing (%). No cases of serious issues noted within this group.

Private Intellectual Disability Care Healthcare Assistants:

This group had 116 respondents; the majority of this group 41.3% had positive to low positive wellbeing. This group had the largest proportion of stress problem (31.0%) category weighting. This group had the second-largest distribution of serious issues.

Public Mental Health Care Services Healthcare Assistants:

This group had 32 respondents; 56.2% had positive wellbeing; with 18.8% presented with marginal wellbeing and stress issues. One case of distress issues with no case of serious issues was found.

Private Mental Health Care Services Healthcare Assistants:

This group had 17 respondents; results should be viewed with caution due to the small sample size of this group; which may impact on the generalisability of results. 53.9% (9 counts) presented with positive wellbeing and Two respondents reported marginal wellbeing.

Table IV. 29 Descriptive Comparative Statistics of General Wellbeing Schedule Category Scores of Whole Study Population by Care Setting*

	N*	Positive Well-being		Low Positive Well-being		Marginal		Stress Problem		Distress Issues		Serious Issues	
		n	(%)	n	(%)	N	(%)	n	(%)	n	(%)	n	(%)
Public Hospital	186	82	(44.1)	28	(15.1)	25	(13.4)	36	(19.3)	13	(7.0)	2	(1.1)
Private Hospital	119	48	(40.3)	12	(10.1)	15	(12.6)	36	(30.3)	6	(5.0)	2	(1.7)
Public Nursing Home	197	81	(41.1)	31	(15.7)	28	(14.2)	45	(22.8)	9	(4.8)	3	(1.5)
Private Nursing Home	310	119	(38.4)	50	(16.1)	39	(12.6)	77	(24.8)	19	(6.1)	6	(2.0)
Public Home Care	96	40	(41.7)	16	(16.7)	12	(12.5)	21	(21.8)	6	(6.3)	1	(1.0)
Private Home Care	339	144	(42.5)	43	(12.7)	44	(13.0)	77	(22.7)	28	(8.2)	3	(0.9)
Agency	351	153	(43.6)	50	(14.2)	47	(13.4)	75	(21.4)	23	(6.5)	3	(0.9)
Day Care Centre	69	25	(36.2)	13	(18.8)	9	(13.0)	18	(26.1)	4	(5.9)		
Charity Organisation	65	27	(41.5)	8	(12.3)	4	(6.2)	18	(27.7)	6	(9.2)	2	(3.1)
Area Clinic	7					4	(57.1)	2	(28.6)	1	(14.3)		
Area Hospice	17	13	(76.5)	1	(5.9)			2	(11.8)	1	(5.9)		
Area Addiction services	7	4	(57.1)	1	(14.3)			2	(28.6)				
ID Care Public	81	36	(44.4)	15	(18.5)	8	(9.9)	18	(22.2)	4	(4.9)		
ID Care Private	116	28	(24.1)	20	(17.2)	19	(16.5)	36	(31.0)	9	(7.8)	4	(3.4)
Mental Health Public	32	18	(56.2)	1	(3.1)	6	(18.8)	6	(18.8)	1	(3.1)		
Mental Health Private	17	9	(52.9)			2	(22.8)	4	(23.5)	1	(14.3)	1	(14.3)

N*: Valid Denominator

▭ : No Cases Observed

Descriptive Statistics of sub-score categories of Wellbeing

The following tables present descriptive information regarding study respondent observation of general well-being as reported via the GWBS (The General Well Being Schedule) as suggested by Dupuy (1978). Descriptive statistics within this section include mean (average), medians (middle value), standard deviation (how different some respondents are from the mean) and respondent score range. All results reported are split into sub-score levels which report the following variables: Anxiety; Depression; Positive well-being; Self-control; Vitality and General health. Lower scores represent greater distress (1= Most distressed – 5= Least distressed).

Note: As noted in Chapter 3 (Methods); Medians and Inter quartile range (IQR) have been used due to the variable ordinal nature.

Table IV. 30 GWBS Descriptive Statistics of Public Hospital HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Hospital n=187	GWBS Total	79.00 (20.00)	78.59	15.28	35.00	-	110.00
	Anxiety	4.50 (1.25)	4.57	1.08	1.75	-	7.00
	Depression	5.00 (1.75)	5.04	1.42	0.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.69	0.55	2.33	-	5.33
	Self – Control	4.33 (0.67)	4.22	0.63	2.33	-	6.00
	Vitality	3.67 (2.00)	3.72	1.41	0.67	-	7.00
	General Health	5.00 (2.50)	5.14	1.68	1.50	-	8.00

Table IV. 31 GWBS Descriptive Statistics of Private Hospital HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Private Hospital n=119	GWBS Total	76.00 (24.00)	76.84	16.70	33.00	-	119.00
	Anxiety	4.25 (1.75)	4.32	1.23	1.75	-	7.00
	Depression	5.00 (2.33)	4.91	1.39	1.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.61	0.57	2.00	-	5.00
	Self – Control	4.33 (0.67)	4.28	0.78	2.00	-	6.00
	Vitality	3.67 (2.67)	3.67	1.63	0.67	-	7.33
	General Health	5.00 (1.75)	5.08	1.66	0.50	-	8.00

Table IV. 32 GWBS Descriptive Statistics of Public Nursing Home HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Nursing Home n=197	GWBS Total	78.00 (21.00)	78.34	14.94	32.00	-	117.00
	Anxiety	4.50 (1.25)	4.54	1.11	2.00	-	7.00
	Depression	5.00 (1.67)	5.05	1.41	0.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.71	0.50	2.33	-	5.00
	Self – Control	4.00 (1.00)	4.15	0.67	2.00	-	6.00
	Vitality	3.67 (2.00)	3.73	1.36	0.67	-	7.00
	General Health	5.00 (2.50)	5.15	1.68	1.00	-	8.00

Table IV. 33 GWBS Descriptive Statistics of Private Nursing Home HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Private Nursing Home **n=310**	**GWBS Total**	77.00 (21.00)	77.18	15.97	31.00	-	119.00
	Anxiety	4.50 (1.50)	4.40	1.15	1.75	-	7.00
	Depression	5.00 (2.00)	4.95	1.40	0.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.65	0.57	1.33	-	5.00
	Self – Control	4.33 (0.67)	4.25	0.70	2.00	-	6.00
	Vitality	3.67 (2.33)	3.62	1.54	0.67	-	7.33
	General Health	5.00 (2.50)	5.08	1.60	0.50	-	8.00

Table IV. 34 GWBS Descriptive Statistics of Public Home care HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Home care **n=96**	**GWBS Total**	78.00 (21.00)	78.23	14.70	35.00	-	109.00
	Anxiety	4.75 (1.44)	4.55	1.11	2.00	-	7.00
	Depression	5.00 (1.67)	5.11	1.39	1.00	-	7.33
	Positive Well-being	3.67 (0.67)	3.67	0.51	2.33	-	5.00
	Self – Control	4.33 (0.33)	4.18	0.65	2.33	-	6.00
	Vitality	3.50 (2.50)	3.57	1.31	0.67	-	6.33
	General Health	5.00 (21.0)	5.21	1.78	1.50	-	8.00

Table IV. 35 GWBS Descriptive Statistics of Private Home care HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Private Home care **n=339**	**GWBS Total**	78.00 (22.00)	78.11	16.30	28.00	-	119.00
	Anxiety	4.50 (1.75)	4.46	1.18	1.75	-	7.00
	Depression	5.00 (2.00)	4.98	1.42	0.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.67	0.55	1.33	-	5.33
	Self – Control	4.33 (0.67)	4.28	0.63	2.67	-	6.00
	Vitality	3.67 (2.33)	3.71	1.50	0.67	-	7.33
	General Health	5.00 (2.50)	5.17	1.66	0.50	-	8.00

Table IV. 36 GWBS Descriptive Statistics of Day Care Centre HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Day Care Centre **n=69**	**GWBS Total**	76.00 (22.00)	78.74	15.28	48.00	-	118.00
	Anxiety	4.50 (1.88)	4.49	1.14	2.25	-	6.75
	Depression	4.67 (2.00)	4.85	1.37	2.00	-	7.33
	Positive Well-being	3.67 (0.67)	3.71	0.51	2.33	-	5.00
	Self – Control	4.33 (1.00)	4.31	0.76	3.00	-	6.00
	Vitality	4.00 (1.83)	4.04	1.43	0.67	-	7.33
	General Health	4.50 (2.00)	5.03	1.56	1.50	-	8.00

Table IV. 37 GWBS Descriptive Statistics of Charity Organisation HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Charity Org. n=65	GWBS Total	78.00 (24.00)	75.20	16.96	37.00	-	118.00
	Anxiety	4.25 (1.88)	4.19	1.14	1.75	-	6.75
	Depression	5.00 (2.33)	4.73	1.40	1.00	-	7.33
	Positive Well-being	3.67 (0.67)	3.74	0.64	2.33	-	5.67
	Self – Control	4.33 (1.00)	4.29	0.76	2.67	-	6.00
	Vitality	3.67 (2.00)	3.67	1.46	0.67	-	7.33
	General Health	5.00 (2.50)	4.55	1.79	0.50	-	8.00

Table IV. 38 GWBS Descriptive Statistics of Clinic HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Clinic n=7	GWBS Total	71.00 (10.0)	67.29	7.36	53.00	-	73.00
	Anxiety	3.50 (1.25)	3.89	0.73	3.00	-	5.00
	Depression	4.00 (1.00)	3.90	1.23	2.00	-	6.00
	Positive Well-being	3.33 (0.67)	3.43	0.46	3.00	-	4.33
	Self - Control	3.67 (1.00)	3.81	0.57	3.00	-	4.67
	Vitality	2.33 (1.00)	2.52	1.03	0.67	-	4.00
	General Health	5.00 (4.50)	5.36	2.19	2.50	-	8.00

Table IV. 39 GWBS Descriptive Statistics of Hospice HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Hospice Care n=17	GWBS Total	95.00 (19.00)	88.88	17.10	52.00	-	118.00
	Anxiety	5.00 (2.25)	4.88	1.34	2.50	-	6.75
	Depression	6.67 (2.33)	5.78	1.51	2.00	-	7.33
	Positive Well-being	3.67 (1.00)	3.76	0.57	2.33	-	4.67
	Self - Control	4.33 (0.83)	4.41	0.80	3.00	-	6.00
	Vitality	5.67 (1.67)	5.06	1.60	0.67	-	7.33
	General Health	6.50 (2.50)	6.15	1.66	2.00	-	8.00

Table IV. 40 GWBS Descriptive Statistics of Addiction Care HCAs

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Addiction Care n=7	GWBS Total	86.00 (31.00)	83.29	14.28	64.00	-	101.00
	Anxiety	4.25 (1.50)	4.36	1.02	3.25	-	6.00
	Depression	4.33 (2.33)	5.19	1.30	4.00	-	7.00
	Positive Well-being	3.67 (0.67)	3.76	0.37	3.33	-	4.33
	Self - Control	4.33 (1.00)	4.29	0.68	3.33	-	5.33
	Vitality	5.33 (2.67)	4.86	1.39	3.00	-	6.33
	General Health	6.00 (3.50)	5.79	1.65	4.00	-	8.00

Table IV. 41 GWBS Descriptive Statistics of Public Intellectual Disability Care

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Intellectual Disability Care n=81	GWBS Total	78.00 (21.0)	79.06	14.55	42.00	-	110.00
	Anxiety	4.50 (1.63)	4.49	1.12	1.50	-	6.75
	Depression	5.00 (1.67)	5.02	1.25	1.33	-	7.33
	Positive Well-being	3.67 (0.67)	3.76	0.51	2.67	-	5.00
	Self - Control	4.33 (0.67)	4.30	0.66	3.33	-	6.00
	Vitality	4.00 (2.00)	3.90	1.39	0.67	-	6.67
	General Health	5.00 (2.25)	5.06	1.69	1.50	-	8.00

Table IV. 42 GWBS Descriptive Statistics of Private Intellectual Disability Care

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Private Intellectual Disability Care n=116	GWBS Total	72.50 (18.0)	72.98	15.82	33.00	-	118.00
	Anxiety	4.00 (1.50)	4.06	1.13	1.75	-	6.75
	Depression	4.67 (2.00)	4.60	1.35	0.67	-	7.33
	Positive Well-being	3.67 (0.67)	3.61	0.50	2.33	-	5.00
	Self - Control	4.00 (0.67)	4.06	0.70	2.67	-	6.00
	Vitality	3.33 (2.00)	3.42	1.48	0.67	-	7.33
	General Health	5.00 (1.50)	4.83	1.47	0.50	-	8.00

Table IV. 43 GWBS Descriptive Statistics of Public Mental Health Care

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Mental Health n=32	GWBS Total	84.00 (25.00)	82.38	15.50	44.00	-	105.00
	Anxiety	4.63 (1.69)	4.70	1.02	2.50	-	6.25
	Depression	5.67 (2.33)	5.21	1.50	1.33	-	7.33
	Positive Well-being	3.83 (0.67)	3.76	0.59	2.33	-	5.33
	Self - Control	4.00 (1.00)	4.16	0.70	3.00	-	5.67
	Vitality	4.33 (2.67)	4.28	1.46	1.33	-	6.33
	General Health	6.00 (2.38)	5.69	1.42	2.00	-	8.00

Table IV. 44 GWBS Descriptive Statistics of Private Mental Health Care

Setting Area	Sub-score Label	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Private Mental Health n=17	GWBS Total	86.00 (34.00)	80.12	22.57	31.00	-	118.00
	Anxiety	4.25 (2.50)	4.54	1.57	1.25	-	6.75
	Depression	5.67 (3.00)	5.02	1.82	1.00	-	7.33
	Positive Well-being	4.00 (0.67)	3.75	0.51	2.33	-	4.33
	Self - Control	4.00 (0.83)	4.25	0.80	3.33	-	6.00
	Vitality	4.00 (2.33)	3.98	1.85	0.67	-	7.33
	General Health	5.50 (21.00)	5.47	1.82	2.00	-	8.00

Section VIII
General Wellbeing Schedule: Comparative Statistics Correlation Results by Setting

Overall Correlation Results – General Well-being Schedule

The following results come from exploratory Spearman Rho correlation analysis computed for all General Well-bring Schedule questionnaire questions; Spearman Rho (rank test) was used due to the ordinal nature of the variables which were used. Positive correlations illustrate a monotonic relationship were two variables move in the same direction (in tandem). Negative correlations show deviations between two variables, moving in different directions.

Correlation Co-efficient strength:
Perfect: 1.00 Strong: 0.6 -0.9 Moderate: 0.2-0.5 Weak: 0.01 - <0.02

In total 27 monotonic correlations were found; all results were found to be statistically significant with p values < 0.01. Table IV. 45 presents a summarised overview of all statistically significant spearman correlations found within 'Appendix J' GWBS correlation matrix of the entire study sample.

Due to the multitude of different care settings within this study, an entire population approach was used.

Table IV. 45 GWBS Summary of Significant Spearman Correlations

Variable:	Co-efficient	Correlation Strength Type
• *'Stress' was correlated with feeling 'Sad, Discouraged or Hopeless'*	0.572	**Moderate Positive**
• *'Anxiety' was correlated with feeling 'Sad, Discouraged or Hopeless'*	0.599	**Moderate Positive**
• *'Downhearted' was correlated with feeling 'Sad, Discouraged or Hopeless'*	0.584	**Moderate Positive**
• *'Anxiety' was correlated with 'Stress'*	0.596	**Moderate Positive**
• *'Downhearted / Feeling Blue' was correlated with 'Anxiety'*	0.631	**Strong Positive**
• *'Felt tired, Worn out and Exhausted' was correlated with 'Waking up Fresh'*	0.577	**Moderate Positive**
• *'Energy or Vitality' was correlated with 'Waking up Fresh'*	0.603	**Strong Positive**
• *'Felt tired, Worn out and Exhausted' was correlated with 'Downhearted'*	0.560	**Moderate Positive**
• *'Depressed' was correlated with 'Downhearted / Blue'*	0.570	**Moderate Positive**
• *'Energy or Vitality' was correlated with 'Felt tired, worn out and Exhausted'*	0.604	**Strong Positive**
• *'Energy or Vitality' was correlated with 'Relaxed or Tense'*	0.643	**Strong Positive**
• *'Depressed or Cheerful' was correlated with 'Relaxed or Tense'*	0.604	**Strong Positive**
• *'Depressed or Cheerful' was correlated with 'Energy and Vitality'*	0.578	**Moderate Positive**

Section IX

Minnesota Career Satisfaction: Descriptive Statistics Results by Setting

Descriptive Statistics on Minnesota Career Satisfaction

Table IV. 46 presents a descriptive comparative frequency table of three scales of satisfaction which the Minnesota Career Satisfaction questionnaire (Short form) evaluates. The Minnesota Career Satisfaction questionnaire can be found in the Case Report Form (Appendix F).

Types of Satisfaction include:

General Satisfaction

Refers to all areas of Career Satisfaction (How people feel about all facets about their job and the factors that change our perception of how people like their job / Career)

Intrinsic Satisfaction

Refers to Occupational Conditions (How people feel about the nature of the job's tasks; doing the job at hand)

Extrinsic Satisfaction

Refers to Environmental Conditions (How people feel about features of the job that are external to the work; ie. Work conditions, pay, respect)

Satisfaction was ranked into the following levels (Responding Scores):

Stratified		**Simplified**	
• **Highly Unsatisfied** (0 – 19).		**Least Degree of Satisfaction**	(0 – 33)
• **Unsatisfied** (20 – 39)		**Average Degree of Satisfaction**	(34 – 66)
• **Can't Decide** (40 – 59).		**High Degree of Satisfaction**	(67 -100)
• **Satisfied** (60 – 79)			
• **Highly Satisfied** (80 – 100)			

	General Satisfaction	**Intrinsic Satisfaction**	**Extrinsic Satisfaction**
Least Degree	1.8%	2.7%	3.9%
Average Degree	87.4%	91.4%	43.0%
High Degree	10.8%	5.9%	53.1%

The visual accompanying this section observes degrees of satisfaction of the entire study population.

An important element of this survey is the amalgamation of different questions; it is therefore important to look at each range score to correctly attain meaning from the results presented in the table below. Due to the amalgamation of questions for modelling; Correlations found within this study sample are presented in Section VI.9. This project specifically looked at issues similar to each question type within descriptive frequencies and associations (Section VI.2).

Median Differences

As noted in Chapter 3 (Methods); medians have been used due to the variables are ordinal in nature. Means have been used in previous studies but both median and mean have been presented to ensure that real differences can be seen between groups. Means used in ordinal type data can hide important findings.

Most notable median findings include 27 cases of 'Can't Decide,' regarding how satisfied a variety of care setting groups were in connection to all three scales of satisfaction. The addiction services care setting group noted an inability to decide if they were satisfied for not on all satisfaction scales; but this need to be evaluated in light of this groups small number (n=7).

Only two cases of highly satisfied satisfaction was noted in private hospital care setting group (Extrinsic Satisfaction) and clinic-based care settings (Extrinsic Satisfaction); but this should be seen in light of clinic-based setting group's small number (n=7). One median case of 'Unsatisfied,' was found within the hospice care setting group (Intrinsic Satisfaction). No median cases of 'Highly Unsatisfied,' were found.

Range Scores

Analysing range scores allow for a clear observation of lowest and highest scores in each satisfaction type in relation to each care setting. Most notable findings included no findings of 'highly unsatisfied' cases throughout the entire study population. Private nursing home care setting responders observed a range score of 20% to 100% in all three forms of satisfaction; indicating that the lowest category was unsatisfied, and the highest category seen within this group was highly satisfied.

The lowest scores within Hospital; Nursing Home; Home Care; Day care Centre and Hospice Care groups irrespective of sector presented with 20% minimum (lowest) range scores notifying unsatisfaction within all satisfaction scales. Charity Organisations, Clinic, Addiction Services, Intellectual Disability Care and Mental Health Care Services irrespective of sector presented with variable minimum (lowest) range scores (>20%).

The highest scores within Hospital; Nursing Home; Home Care; Day care Centre, Hospice Care, Intellectual Disability and Mental Health Care Services groups irrespective of sector presented with 100% maximum (highest) range scores notifying 'highly satisfied' within extrinsic satisfaction scales.

'Can't Decide' was a common feature within areas of general and intrinsic satisfaction in a variety of care settings which include, Public hospital; Nursing homes (Private & Public); Home

Care (Private & Public); Public Intellectual Disability, Public Mental Health Care Services. This was also evident within groups working in Clinic; Charity Organisations; Day care Centres and Addiction services

Table IV. 46 Minnesota Career Satisfaction Survey Descriptive Statistical Results by Setting

Setting Area	N	Satisfaction Type	Median (IQR)	Mean	SD	Range Scores (Min-Max)		
Public Hospital	187	Intrinsic	50.00 (16.36)	50.34	12.73	20.00	-	89.09
		Extrinsic	66.67 (26.67)	65.63	18.34	20.00	-	100.00
		General	55.00 (20.36)	54.55	13.55	20.00	-	93.57
Private Hospital	119	Intrinsic	52.73 (23.64)	53.92	16.10	20.00	-	96.36
		Extrinsic	80.00 (33.33)	72.77	21.85	20.00	-	100.00
		General	60.00 (27.86)	59.66	17.24	20.00	-	93.57
Public Nursing Home	196	Intrinsic	49.09 (19.09)	49.94	13.65	20.00	-	89.09
		Extrinsic	66.67 (30.00)	64.82	19.36	20.00	-	100.00
		General	55.00 (20.00)	54.28	14.04	20.00	-	93.57
Private Nursing Home	310	Intrinsic	49.09 (21.82)	51.58	15.06	20.00	-	100.00
		Extrinsic	73.33 (33.33)	70.29	20.54	20.00	-	100.00
		General	57.14 (23.57)	57.48	15.87	20.00	-	100.00
Public Home Care	96	Intrinsic	50.00 (16.36)	50.34	12.73	20.00	-	89.09
		Extrinsic	66.67 (29.17)	65.63	18.34	20.00	-	100.00
		General	55.00 (20.89)	54.55	13.55	20.00	-	93.57
Private Home Care	339	Intrinsic	49.09 (20.00)	50.56	14.65	20.00	-	90.91
		Extrinsic	66.67 (30.00)	66.63	20.06	20.00	-	100.00
		General	54.29 (23.57)	55.72	15.42	20.00	-	95.00
Day Care Centre	69	Intrinsic	47.27 (14.55)	48.75	13.31	20.00	-	83.64
		Extrinsic	63.33 (25.00)	65.60	17.66	20.00	-	100.00
		General	54.29 (19.64)	53.99	13.65	20.00	-	82.14
Charity Organisation	65	Intrinsic	50.91 (20.00)	50.85	13.81	25.45	-	87.27
		Extrinsic	66.67 (31.67)	65.64	20.47	26.67	-	100.00
		General	57.86 (20.00)	55.69	15.60	25.00	-	90.00
Area Clinic	7	Intrinsic	50.91 (27.27)	57.14	12.76	43.64	-	72.73
		Extrinsic	80.00 (3.33)	81.43	4.24	76.67	-	90.00
		General	57.86 (5.71)	59.69	5.44	52.86	-	70.00
Area Hospice	17	Intrinsic	38.18 (20.91)	42.89	13.70	20.00	-	65.45
		Extrinsic	46.67 (40.00)	55.10	21.64	20.00	-	86.67
		General	46.43 (29.29)	46.34	15.93	20.00	-	72.14
Area Addiction Services	7	Intrinsic	43.64 (10.91)	44.42	6.11	36.36	-	52.73
		Extrinsic	56.67 (30.00)	62.38	16.97	40.00	-	86.67
		General	50.71 (11.43)	49.49	6.72	41.43	-	60.71
ID Care Public	81	Intrinsic	50.91 (17.27)	49.32	13.47	21.82	-	83.64
		Extrinsic	66.67 (26.67)	64.53	19.01	20.00	-	100.00
		General	55.00 (20.00)	54.16	14.08	20.71	-	85.00
ID Care Private	116	Intrinsic	50.91 (20.00)	53.15	14.11	25.45	-	90.91
		Extrinsic	73.33 (27.67)	70.46	18.05	36.67	-	100.00
		General	60.00 (22.14)	58.95	14.30	30.00	-	88.57
Mental Health Public	32	Intrinsic	43.64 (22.27)	50.45	17.78	27.27	-	92.73
		Extrinsic	70.00 (32.50)	67.81	19.94	30.00	-	100.00
		General	52.50 (21.07)	56.23	17.17	25.00	-	93.57
Mental Health Private	17	Intrinsic	50.91 (26.36)	54.33	20.37	25.45	-	96.36
		Extrinsic	73.33 (30.00)	72.35	19.54	36.67	-	100.00
		General	62.14 (27.14)	61.01	18.45	31.43	-	97.14

Section X

Minnesota Career Satisfaction: Comparative Statistics Results by Setting

Overall Correlation Results – Minnesota Career Satisfaction

The following results come from exploratory Spearman Rho correlation analysis computed for all Minnesota Career Satisfaction (MCS) questionnaire questions; Spearman Rho (rank test) was used due to the ordinal nature of the variables which were used. Positive correlations illustrate a monotonic relationship were two variables move in the same direction (in tandem). Negative correlations show deviations between two variables, moving in different directions.

Correlation Co-efficient strength:
Perfect: 1.00
Strong: 0.6 -0.9
Moderate: 0.2-0.5
Weak: 0.01 - <0.02

In total 23 monotonic correlations were found; all results were found to be very statistically significant with p values < 0.01. Table IV. 47 presents a summarised overview of all statistically significant spearman correlations found within 'Appendix K' MCS correlation matrix of the entire study sample.

Due to the multitude of different care settings within this study, an entire population approach was used.

Table IV. 47 Summary of Significant MCS Spearman Correlations

Variable:	Co-efficient	Correlation Strength Type
• 'Supervisor Competence (Decision making)' was correlated with 'How Boss Handles Workers'	0.746	**Strong Positive**
• 'Company Policy to Practice' was correlated with 'How Boss Handles Workers'	0.613	**Strong Positive**
• 'Policies and Practice towards Employees' was correlated with 'How Boss Handles Workers'	0.616	**Strong Positive**
• 'How well Supervisor Understands me' was correlated with 'How Boss Handles Workers'	0.638	**Strong Positive**
• The 'Way boss backs up Employees' was correlated with 'How Boss Handles Workers'	0.739	**Strong Positive**
• The 'Way Boss Manages Complaints Of His/Her Employees' was correlated with 'How Boss Handles Workers'	0.736	**Strong Positive**
• 'Company Policy to Practice' was correlated with 'Supervisor Competence (Decision Making)'	0.606	**Strong Positive**
• 'Supervisor Understands Me' was correlated with 'Supervisor Competence (Decision Making)'	0.696	**Strong Positive**
• 'How My Boss Backs Up His/Her Employees' was correlated with 'Supervisor Competence (Decision Making)'	0.675	**Strong Positive**
• The 'Way Boss Manages Complaints Of His /Her Employees' was correlated with 'Supervisor Competence (Decision Making)'	0.667	**Strong Positive**
• 'Company Policy Administration' was correlated with ' Company Policy to Practice'	0.737	**Strong Positive**
• 'Trying own Methods' was correlated with 'Freedom Of Judgement'	0.700	**Strong Positive**
• 'Company Policy Administration' was correlated with 'Policy and Practice of Employees'	0.742	**Strong Positive**
• How 'Boss Backs Up Their Employees' was correlated with 'Supervisor Understanding Me'	0.639	**Strong Positive**
• The 'Way Boss Manages Complaints Of His/Her Employees' was correlated with how 'Boss Backs Up Their Employees'	0.805	**Strong Positive**

ANOVA – Analysis of Variance

The Results found in Table IV. 48 represent an ANOVA test which analyses variance within variables; this ANOVA was conducted to compare the effect of different care settings on career satisfaction within the study sample.

Findings concluded that a variety of statistically significant changes between different Care setting groups and perceived general career well-being. Four statistically significant differences were found between care settings; after post hoc analysis using the Bonferroni adjustment; which limits the possibility of getting a statistically significant result when testing multiple hypotheses, observed only three true statistically significant differences.

There was a statistically significant effect of working within a private hospital on general career satisfaction at the <0.01 level (F=9.337, df=2, p<0.001). Post hoc analysis (Bonferroni adjustment) continued to indicate a statistically significant effect between average degree and high degree of satisfaction (p<0.001, CI=0.04-0.12).

There was a statistically significant effect of working within a private nursing home on general career satisfaction at the <0.01 level (F=5.498, df=2, p=0.003). Post hoc analysis (Bonferroni adjustment) indicated a statistically significant effect between average degree and high degree of satisfaction (p=0.003, CI=0.03-0.18).

There was a final statistically significant result which observed the effect of working in hospice care on general career satisfaction at the <0.01 level (F=5.733, df=2, p=0.003). Post hoc analysis (Bonferroni adjustment) continued to highlight significant findings after adjustment. There were two significant differences between the three in variable comparisons these included average degree and low degree of satisfaction (p=0.007, CI=0.01-0.09) and low degree and average degree of satisfaction (p=0.002, CI=0.02-0.1).

Table IV. 48 ANOVA Results by General Satisfaction of HCAs in each Care Setting Type

Variables	Sources of Variance	Sum of Squares	df	Mean Square	F	p Value	Comp	p Value
			ANOVA				**Bonferroni Adjustment***	
Hospital Private	Between Groups	1.117	2	0.558	9.337	**<0.001*****	AD-HD	**<0.001*****
	Within Groups	110.212	1843	0.06			HD-AD	**<0.001*****
	Total	111.329	1845					
Hospital Public	Between Groups	0.115	2	0.058	0.636	0.532		**ns**
	Within Groups	167.144	1843	0.091				
	Total	167.259	1845					
ID Care Private	Between Groups	0.424	2	0.212	3.611	**0.027****		**ns**
	Within Groups	108.286	1843	0.059				
	Total	108.711	1845					
ID Care Public	Between Groups	0.088	2	0.044	1.053	0.349		**ns**
	Within Groups	77.357	1843	0.042				
	Total	77.446	1845					
Nursing Home Private	Between Groups	1.53	2	0.765	5.498	**0.004****	AD-HD	**0.003****
	Within Groups	256.412	1843	0.139			HD-AD	**0.003****
	Total	257.941	1845					
Nursing Home Public	Between Groups	0.282	2	0.141	1.48	0.228		**ns**
	Within Groups	175.695	1843	0.095				
	Total	175.977	1845					
Home Care Private	Between Groups	0.091	2	0.046	0.304	0.738		**ns**
	Within Groups	276.655	1843	0.15				
	Total	276.746	1845					
Home Care Public	Between Groups	0.084	2	0.042	0.85	0.428		**ns**
	Within Groups	90.924	1843	0.049				
	Total	91.008	1845					
Mental Health Public	Between Groups	0.043	2	0.022	1.264	0.283		**ns**
	Within Groups	31.402	1843	0.017				
	Total	31.445	1845					
Mental Health Private	Between Groups	0.01	2	0.005	0.545	0.582		**ns**
	Within Groups	16.833	1843	0.009				
	Total	16.843	1845					
Day Care Centre	Between Groups	0.003	2	0.002	0.043	0.958		**ns**
	Within Groups	66.418	1843	0.036				
	Total	66.421	1845					
Area Charity Organisations	Between Groups	0.007	2	0.004	0.105	0.901		**ns**
	Within Groups	62.704	1843	0.034				
	Total	62.711	1845					
Hospice Care	Between Groups	0.104	2	0.052	5.733	**0.003****	AD-LD	**0.007****
	Within Groups	16.739	1843	0.009			LD-HD	**0.002****
	Total	16.843	1845					
Clinic	Between Groups	0.004	2	0.002	0.507	0.602		**ns**
	Within Groups	6.97	1843	0.004				
	Total	6.973	1845					
Addiction services	Between Groups	0.004	2	0.002	0.507	0.602		**ns**
	Within Groups	6.97	1843	0.004				
	Total	6.973	1845					

df= Degrees of Freedom; F= F Test Statistic; ; Comp = Comparison; AD = Average Degree of Satisfaction; LD= Least Degree of Satisfaction; HD=Highest Degree of Satisfaction; * = Only Significant results Reported; ns= Non Significant

Chapter Five

Discussion

"Doras Feasa Fiafraí"

The door to knowledge is to question

-Irish Proverb

Introduction

Healthcare assistants/ qualified carers provide the majority of the direct patient care and make up the largest group of employees working within our health service and within our health care facilities today regardless of sector or care setting (HCA, 2019). For such a large group of workers nationally who partake inpatient care on a very personal level both to their client/service user/ patient and / or resident a resource of research information would be expected. Until now, change came about only by reference to data from elsewhere.

The purpose of this study was to assess factors associated with caregiving among a group of trained and qualified carers in Ireland. This included aspects of their Training, work setting, skill learned and skills used in practice, well-being and career satisfaction. Differences between carers in different healthcare settings (hospital /nursing home /home care /intellectual disability /mental health) and sectors (public, private, public-funded private, agency, charity) were explored. The study was undertaken because of the complete lack of data on these aspects of caring in Ireland. Up to now, reports in the media or information used by policymakers was based on qualitative information or extremely small samples. The highly varied roles fulfilled by HCAs and qualified carers meant that a wide-ranging study would be required to represent their interests adequately.

Specifically, the objectives of the study were: to profile the care settings HCAs are employed in; to ascertain the   training undertaken and level of award achieved by HCAs; to observe differences between skills learned and skills actively used within practice; to examine differences in sub categories of HCAs by care settings (i.e. Hospital /Nursing Home /Home care /Intellectual Disability /Mental Health) and sector (i.e. public, private, public funded private, agency and Charity); to see if there was any confounding factors or risk in regards to working in a certain sector or setting in connection to not being respected professionally; to determine if the general wellbeing of workers is different in different care settings and sectors; to determine satisfaction with current conditions of their occupation; to observe any relationship between wellbeing (and satisfaction) and type of work. To ascertain if any change is needed to assist in satisfaction and wellbeing of Healthcare Assistants and Qualified Carers.

Sociodemographic information

The majority of Healthcare Assistants and Qualified Carers were female (93%). This has been regarded as the norm due to the historical role of women in the caring professions (Marques et al., 2018). This study noted a growing trend towards older adults working in care compared with younger groups. Ireland has a growing older population and it is concerning to see a reduction in younger age groups working in the area of healthcare delivery. The ESRI (2019) in their publication 'Demand for Healthcare Workers 2019 – 2032, forecast an increased demand in all areas of care from community home care (up to 60%), nursing home care along with acute (hospital) care. From primary to tertiary care there will be an increased demand for an abled workforce, which includes healthcare assistants and qualified carers. This is especially important in light of the new healthcare delivery plan, Sláinte Care, with an emphasis moving to community based care; where the majority of care should be delivered at or closer to the home of the patient or service user (DoH, 2017).

The majority of respondents were based in Leinster (60%); while a minority were based Ulster (7%) There was a higher proportion of respondents who lived in suburban areas, but this is expected as many carers will migrate to areas which will have work. The study had a good mixture of different sectors represented, from the public sector (HSE run or accredited), private sector, publicly funded private sector where the state pays for services through a private contractor (e.g. some home care). Agency workers, who do not have a set sector, were represented (17.5%). Due to reduced workforce retention in Ireland agency workers are providing a more regular service to different care settings (DoH, 2017).

Care settings represented in this study covered a wide range of areas. The largest setting subgroups represented were home care HCAs (34.5%); nursing home HCAs (29%); hospital HCAs (14%) and intellectual disability HCAs [both residential and community] (12%). There are a number of reasons why home care healthcare assistants were most willing to complete this survey. It is of note that the study was released for respondents not long after the HSE had placed restrictions on home care packages around the country (June 2019), therefore, reducing workloads for many carers.

Skillset of Healthcare Assistants and Qualified Carers

Overview

Skillsets for HCA and Carers is currently based on the version of QQI training they have completed. Issues have also been raised in literature regarding training; which range from non-generalisation of modules to breaches in academic standards. History has also highlighted a serious over-neglect of the training needs of auxiliary staff which include healthcare assistants and qualified carers. 'Unqualified' and untrained' have been accepted as synonymous adjectives (Edwards, 1997).

The majority of skillsets were similar in different care settings; some findings were surprising while other findings just show the variability of the role. The most common skills noted include activities of daily living (77%); carers notation (50%); dementia care (47%); palliative care (42%) and fluid balance (41%) in similar presentation but different proportion the most common skills in practice by the study population include activities of daily living (77%); carers notation (65%); fluid balance (43.5%) and dementia care (41%). When compared to other European Union countries the results are similar when compared to the CC4HCA study (Schäfer et al., 2016). As Table IV.9 has shown the role of the qualified carer / HCA is in balance between practical care and developing clinical skill. From basic care carried out through activities of daily living to the clinical skill of phlebotomy the role is diverse.

The study found when observing the skill 'Intravenous Care,' that 11% of the study sample states that they are trained and therefore competent with this skill; but 13% states that they do this skill in practice. This difference of 36 respondents may seem small but clinical skills should be informed by a trained knowledge base. Similar findings were also observed in medication administration, Safe Administration of Medication (SAMS) is the nationally accepted course for medication administration by those who are not nurses or physicians; 20% of HCAs and qualified carers state that they are trained in SAMS but 19.9% state that they are giving medication. This leaves the HCA or qualified carer in a high risk position.

Skillset: Underutilised Skills

A issue found internationally can be found between different healthcare occupational groups specifically where one working group scope of practice starts and ends (Eagar et al. 2010). This obstacle is evident in the Irish situation. On the whole many healthcare assistants within our sample trained in a variety of different skills outside of the basic QQI (formerly FETAC) training; this could provide evidence to support the point that many HCAs and qualified carers want to take on a more formalised role in which their skills can be of use.

When we look at international healthcare workforce retention issues (Erwee et al. 2012); which result in understaffing in all areas of care, regardless of sector or setting, it is noted that certain professional groups believe that there is a straight line in role and function for healthcare workers but on a whole this is not entirely the case. Several studies have pointed to the use of auxiliary unregistered healthcare workforce; which in Ireland would include healthcare assistants/qualified carers (once called auxiliary nurses). The Cavendish review (2013) and King's College National Nursing Research Unit (2010) noted that "as a consequence of nurses spending increasing time on organisational tasks, some HCAs are now doing a wide range of more advanced tasks traditionally undertaken by registered nurses". These new advanced tasks include cannulation (the insertion of an IV and attachment of IV fluids), applying and monitoring of complex dressings, setting up infusion feeds, monitoring diagnostic machines, giving Injections (under supervision), preparing and administering medication to patients, cardiac telemetry tracing/ECG tracing, taking blood samples along with liaising with medical staff and relatives.

In Ireland all training under QQI full award programmes required to become a HCA/ Carer/ healthcare support worker, includes knowing and being competent to take vital signs (pulse, blood pressure, oxygen saturation, respiratory rate and temperature); but very few qualified HCAs and Carers actually partake in the practice of this job. In some circumstances, this job is reserved for registered nurses but many nurses are unaware of the skillset of HCAs which has led an illusion that all a HCA is skilled in is assistance in activities of daily living. Many HCAs undertake patient observations (vital signs) already as they are trained but there is a larger proportion of HCAs who are trained but do not practice what they have been trained for. This was evident in all sectors within hospital, nursing home, home care and intellectual disability. Similar findings were found in the skills of dementia care and fluid balance, skills in which play a part in baseline HCA and Qualified Carer education.

Some HCAs who do not have a full award and equally do not have the skills required for all areas of care. If a national core competency for HCAs and Carers was in place many tasks would be transferable. Understanding scope of practice for HCAs is not set in stone in Ireland and therefore requires a full scoping of the role which stretches across all sectors **(Recommendations presented in Chapter Six)**.

Skillset: Practice Without Theory

It must be noted that a variety of skills cannot necessarily be learned in a classroom environment, no lecturer, simulator or role play can truly replace practical experience with real people, patient and clients. Skills like communication, teamwork ability and empathy cannot be trained by external means but by experience in most cases. In some cases HCAs are asked by management to take on additional tasks, without training and some HCAs will oblige and some will not for valid reasons. This study observed 39% of the sample being asked to do tasks against their conscious. This was again reflected in 30% of the study sample agreeing that they were asked by management do to tasks that were morally wrong.

Issues on understanding where the scope of practice begins and finishes, still cause problems in all levels, which includes HCAs, nurses, doctors, clinical managers and patients alike. This variability in roles and tasks undertaken by HCAs have been reported in Ireland where some HCAs perceived that they were working far beyond their original scope of practice (Older HCAs, pre-mandatory training) whereas others reported that their skills were underutilised and that there was little scope for the development of the role (Glackin, 2016).

This is evident in certain findings found throughout the skills section of the study; surprisingly the largest group who trained in intravenous access (including phlebotomy) were employed in nursing home settings. A note of concern lies in how some HCAs are carrying out advanced skills without a knowledge base to back said practice. This was evident in nursing homes and less so in hospitals. If a HCA or carer is qualified then there should be no issue re carrying out a task but no untrained person should be going outside their scope of practice. The same issue is also seen in medication administration where untrained individuals are administering medications without the proper training required by safety standards this was notable in home care and nursing home care.

 Those who work in HSE accredited or in the HSE have continuous educational attainment schedules in place, to ensure that all workers are trained to a full award at level 5 of the national qualification framework (NFQ), most notably for those who have worked in the caring support field before the educational requirement was put in place. For all candidates only level 5 full awards are accepted within the HSE internally. Within the private sector many do not continue their training to attain a full level 5 award which leads gaps in knowledge and practice in a large sector, who care for patients on a daily basis who are vulnerable and at risk. Quality of skill and knowledge is an issue that many in the media have noted regarding this topic.

Similar issues are evident in nursing home care, especially within the private sector where emigration opportunities are offered for those within the EU, which includes training within the two required modules (Care Skills and Care of the older person); due to nursing homes being stressful environments some newly acquired workers are left to make decisions about care without the proper background or support in an already overstretched environment. This is expectedly due to a variety of factors from understaffing which has been reported by Nursing homes Ireland (NHI, 2019) to the career being unappealing to younger populations (HCA, 2018).

Employer and employee relations

Unexpected findings included the while approximately two-thirds of respondents noted that their employer allows them (the HCA) opportunities to upskill; the remaining third stated that their employer does not allow or support opportunities to upskill. This was surprising as the majority of those respondents are covered by HIQA, which by legislation states that all healthcare workers must be competent, trained and have full CPD up to date to keep standards and quality of care as the most important tenants of the occupation. Staff should "receive the support, training, and supervision they need to enable them to perform their job to the best of their ability" (HIQA, 2016). 41% of the study population believed that their employer hinders (makes their work harder). The majority of respondents (52%) felt that their manager did not listen to them; this is quite similar to the question relating to the upskilling, context of the time must be looked at, but this number was much higher than expected.

General Well-being

Well-being has been noted throughout our literature review as being an important factor in healthcare workforce retention, deviations from having positive well-being causes burnout in the general population, adding the stressful environment of healthcare, small changes in levels of well-being can have negative effects for the worker, patient and societies public health. As noted by Drennan et al. (2018), a variety of studies have explored the job satisfaction and intention to leave amongst HCAs; however, the evidence is relatively limited. On evaluation, a selection of studies used weak study instruments with limited reliability; furthermore, studies were not population-based therefore their findings could not be generalised to the whole occupational group. Incorrect use of statistical procedure was also an issue noted on evaluation of a selection of studies.

In this study 46% of the studies sample presented with low general wellbeing with categorical scores ranging from marginal wellbeing to serious issues. Van Laar, Edwards and Easton (2007) noted that job satisfaction is an important element of quality of life for healthcare workers. A Variety of studies highlight several physical and mental conditions/factors that influence well-being, with a particular emphasis on physical exhaustion, anxiety, depression, stress, and burnout, this study found similar findings through Spearmen Rho correlation analysis. (Gosseries et al., 2012; Kilfedder et al., 2001; Mason et al., 2016; Preposi Cruz, 2016; Sancassiani et al., 2015; Tepas et al., 2004; Tuisku et al., 2016)

General Well-being (Cont'd)

A significant proportion of the literature available for many healthcare workers, specify how feeling downhearted or feeling blue is strongly correlated with anxiety this was also found within this study (r.=0.63; p value= 0.01). In comparison, many studies have suggested strong correlations regarding burnout, exhaustion, and feeling worn out to low levels of vitality among healthcare staff; this was also found within this study (r=0.60; p value = 0.01). On a superficial level general well-being of healthcare assistants are at an optimum level with 54% presenting with acceptable levels of well-being; but over specifying the positive findings cannot mask issues found; 46% of an entire population is significant; equating to 1 in every 2 HCAs / qualified carers feel they do not have adequate well-being and since previously noted in this study that 89% believe that their work affects their health and wellbeing that there is an opportunity to change future outcomes.

Career Satisfaction

Job satisfaction has become an important research topic within health service research; many studies observe physician and nurse career satisfaction but there is very limited research looking at the healthcare assistant's perspective. As presented by Sattigeri. R & Kulkarni. D, (2017) employees deserve to be treated fairly and with respect regardless of occupation or grade. Job satisfaction to some extent is a reflection of good treatment of the employee along with being an indicator of emotional well-being. Managers should concentrate on the job satisfaction of all employees because dissatisfied employees are more than likely to provide inferior services.

This study used the Minnesota career satisfaction survey within its omnibus survey; this tool observes three different forms of satisfaction which include general, intrinsic and extrinsic types. As described by Martins and Proença (2014) general satisfaction relates to how workers generally feel about their work; intrinsic satisfaction relates to occupational conditions (how the worker feels about the task at hand) and extrinsic satisfaction relates to environmental conditions which are external in nature (how workers feel about work conditions, pay, respect).

This study found that 87% of the study population presented with an average degree of general satisfaction. The study found that 94% of the sample had an average degree of intrinsic satisfaction; which explains that the majority of our study population are satisfied but not to the highest level. With respect to scaling the range score of 34 - 66 on the simplified scale, this represents a large spread which on the stratified scale represented unsatisfied, can't decide and satisfied options. With respect to the data, stratified results represent a truer understanding of the voice of the HCAs and qualified carer.

Therefore the results are concerning as the aim would be to have the majority of the study population in the satisfied to highly satisfied stratified groups. Nonetheless 54% of our study population presented with a high degree of extrinsic satisfaction; the simplified scale result of high degree of satisfaction does

present only positive responses with scores of 67 – 100 representing satisfied to highly satisfied within the stratified grouping.

Some surprising findings were found within this studies analysis which did not reflect the limited literature; some private sector (not all) within this study presented with high degrees of satisfaction regarding extrinsic factors for both private hospitals (Median Score: 80.00 = Highly Satisfied) and intellectual disability care (Median Score: 73.33 = Satisfied). Private nursing homes presented with a satisfied subgroup in extrinsic satisfaction (medians) but when we observe the mean and standard deviation, data points are spread out further than average so we must take this into account. Nonetheless general and intrinsic satisfaction scores represented a don't know response where there is a homeostatic balance between unsatisfaction and satisfaction. A variety of monotonic relationships were found in Spearman Rho correlation analysis, showing significant relationships varying in positivity and negativity.

Issues affecting healthcare assistants and qualified carers

The questions used for issues affecting carers and healthcare assistants were based on regular contacts that the association received from its many members. Most notably the following results give a clear sense that HCAs and qualified carers want to be professionalised by legislation, to be quality assured and want to protect their own health so they may continue their mission. The question 'Should those with Full Award be paid more compared to those who do not?'; was responded to by a clear acceptance that those who invest in their education and skill should be met with acceptable remuneration. Currently, for all sectors, there is no pay difference for full award (full diploma) or completion of the two modules required. This is problematic in industrial relations. Most of the respondents in this survey had attained a full award (84%).

The population as previously mentioned wants a professional body to guide standards; 98% believe that there should be a professional body who should hold a registry or licence system for all working within the area of care. This provides recognition for educational attainment, a way to limit and in time remove poor practice from the area of care. Individuals can move from one setting to another and repeat poor practice. By registration and licencing we can provide a better standard of patient safety. A licence system similar to the Irish Bord Na Altranis would be advisable which includes recommendations from the European Commission and for this reason has been included as a recommendation (Schäfer et al., 2016; Braeseke et al., 2013).

Many within our sample (90%) believed that their work has an effect on their health and wellbeing; for this reason support needs to be given as it has been noted in increasing workforce retention (Chen. L., 2010) and willingness to entice others to join the occupation, making the career more desirable.

Strengths and Limitations

This study presents a variety of strengths that only furthermore validate the importance of such an undertaking. This study is the first of its kind in Ireland; presenting a clear and concise picture of HCA and qualified carer career satisfaction; general wellbeing; skillset and change. Since there is no official body who oversees HCA and qualified carer skill base, registration or satisfaction this study being the first ever in existence in the Republic of Ireland is vital to understand strengths, issues and possible solutions. An additional strength this study has is the use of validated statistical research instruments, which further validate results that have been attained. The study sample size is notable as being one of very few studies internationally that have a sample population of over 1000 respondents over an entire country. This study also attained sample size big enough to provide results applicable to a population of 70,000 HCA's and qualified carers; attaining 99.99 confidence. Since this is the first ever study looking at such a defined population, it is hoped that the study will translate into improved legislation, outcomes and further improvements for both HCAs, qualified carers and their patients. It is hoped that it will spur further research in this important field which will further improve the knowledge base and implore policymakers to be aware of the sometimes hidden challenges experienced by HCAs and qualified carers nationwide.

Minor limitations of this study include results for smaller groups which need to be evaluated correctly, as smaller groups are not representative of the sub-groups population; an example would be of HCAs working in a clinic only setting only seven respondents were noted, therefore results found on the setting clinic needs to be viewed objectively. A possible limitation regarding this study was limited resources; very little research has been done in this field regarding an Irish context. An additional limitation which may have influenced a higher proportion of private sector workers; could be when the study was released the following 24 hours presented with a HSE home care freeze which caused many HCAs to receive limited hours of work which resulted in less pay in an already low paid occupation; also after our study there was a public service health support staff strike, which may have influenced more respondents. This limitation has been controlled by questions in the questionnaire having clear timeframes in which the respondent must answer the question for our study questions were in relation to the past month of work rather than a snapshot of that current moment.

Public Profile of Home care in Ireland

Issues regarding home care in Ireland are well known to the social story of healthcare provision. There are profound issues in public provision of home care thus far public profile and discourse around home care provision has been based on anecdotal reports, not confined just by HCAs themselves but in political discourse by members of Dáil Eireann (Irish Parliament) most notably by Dep. D. Cullinane and others (Cullinane, 2019). Now, we have broader evidence from this study, our hope is a representative sample of HCAs who have profiled the issues ranging from delivery of care; administration; privatisation; value for money regarding state finances and private fees. Other issues noted include educational attainment changes from full award to allowing individuals with a minimum of only two QQI level 5 modules (Care Skills and Care of the older person) is a concern to many, these changes came from the 2017 tender document still in effect (HSE,2017).

Conclusion

In conclusion, the aim was to provide real, precise information for policy makers, institutions and companies to inform policy, legislation and change from the perspective of the population it affects. The study did find that there is still much room for improvement for the development of the role, legislation, policy and skillset of healthcare assistants and qualified carers. Regarding general wellbeing, there still remains issues regarding stress problems which the population suspect is from their occupation; which has been found to be statistically significant. In relation to career satisfaction, a majority of the study population are in a grey area regarding how satisfied they are with their occupation. There still remains many opportunities to entice people into the occupation which have not been availed of yet; but accreditisied professionalisation of the role is required to ensure that Ireland stay in line with international guidelines and continue to protect and ensure patient safety, worker mental health and betterment of public health. Recommendations presented in chapter six are based on international best practice, patient safety, carer/healthcare assistant welfare and the betterment for population health.

Chapter Six

Recommendations

"The Ultimate Purpose of Collecting Data is,

to Provide a Basis for Action or a Recommendation"

-W. Edwards Deming

Introduction

Chapter six in this full report outlines the recommendations that have emerged from the work of this project and from the observations seen within the field/sector. Recommendations will be presented using the following categories:

◊   General Recommendations for all sectors and Settings

◊   Policy / Legislation

◊   Education

◊   Recommendations specific to setting

◊   Improve Well-being

General Recommendations for all sectors and Settings

1. All **settings and Sectors** need to provide **a clear policy of progression** for all HCAs with regards to their educational attainment

2. Staff ratios need to be continually checked; literature and analytical findings from this study have noted an issue with staffing levels. Putting staff mental and physical health at risk due to **understaffing is an issue** which is covered by core competences of HIQA, but nonetheless under staffing is still an issue

3. All workers regardless of setting or sector need to be **proficient in the English language**; an English language test similarly used for nurses should be also be required for HCAs to ensure clients, patients, residents and service users can comprehend their care giver.

4. **Job description needs to be continuously re-evaluated**; to prevent bad practice or over-reliance on certain skills which remove teamwork ability but also limit the potential of learning opportunities for all staff members.

5. **Pay Grade** should be in accordance with the candidate's educational attainment and years of experience.

Policy and Legislation Recommendations

6. The **role of the HCA / Qualified Carer** needs urgent regulation throughout all sectors and settings this is required to ensure a sense of **Occupational Progression** for HCAs and qualified carers.

7. **Professionalisation** of the occupation; It takes **many hours study and practice** to become a fully qualified HCA / carer. We have seen many improvements for careers which require no formal education these include cleaners, security and other skill based employment which have been given better terms and conditions as compared to HCAs and qualified carers.

8. **Regulation** is required **in all areas of care**

9. **Formal mandatory registration / Licence System is required** across **all sectors and setting**, to ensure **consistency of public health provision**, to assist human resource departments with a **one-stop-view** of a candidate's entire **formal education, experiences, continuous professional development, issues and salary scale**. To provide **reassurance to clients, patients, residents and service users** about who cares for them (**Public Reassurance and Safety).** To ensure **consistency in recruitment, training and professional development.** A similar system to the **NMBI** or our **counterparts in Northern Ireland.** This has been **advised** by the **European Commission.**

10. **Home Care (Community Care)** which is public or public funded **should be in the control** of the HSE (**Paying Provisioner**); this **includes** the **payment and case attachment**. The current model of home care is not fit for purpose; this has been noted in many studies worldwide where home care is provided in similar manner. Recent studies **suggest a system** in which **workers** even through agencies are **payed directly from the shift provider** i.e. HSE. In which agency fees are payed via dividence.

11. There needs to be **a system** in place **to inhibit and stop poor practice**, currently a **HCA or qualified carer who has been released from duty can easily find new employment** and **continue malpractice**. This is not acceptable, **current in field interventions are not fit for purpose** therefore **a national registry** is **required**.

12. **Public Funded Training and upskilling (Advancement) for HCAs**, Any fund should not be channelled through the employers but rather directly to HCAs themselves or **colleges, training providers or universities.** HCA's need to be able to see a pathway of career progression through upskilling

13. All healthcare assistant and qualified carer **salary grades should be standardised in all sectors and settings** and based on **educational attainment and years of practice**.

14. There are **two classes of HCA / qualified carer** those with a **full award (fully qualified)** and those who have only **completed part of a full award** but have not or do not plan to finish a full award attainment. Therefore the **role must be divided into two fully defined roles**; examples used throughout the world include: **Certified Healthcare Assistant** (Full Award Completed) and **Non-Certified Healthcare Assistant** (No Full Award Attained Yet).

15. **Different salary scales** should be made available to these two different roles, this would **entice more to finish training to attain a full award**, this also **favours those who invest in their education with fair renumeration for their efforts.** Patient safety would also be improved by having a more educated and fully qualified cohort of care givers.
This would **encourage** more into the **occupation** and provide a sense of **progression**

Educational Recommendations

16. A **national body is required**, (Could be a part of a national registry – similar to NMBI) to **ascertain professional core competences**, to **unify and generalise training of all carers and HCAs** in line **with European standards** as is the **general standard** within nursing, medicine and the allied health professions.

17. **Different Streams** similar to nursing could be used:
    ◊   General (Ability to work in all areas)
    ◊   Acute Care Practice (Hospital based)
    ◊   Paediatrics
    ◊   Maternity
    ◊   Geriatric (Nursing Home)
    ◊   Intellectual Disability
    ◊   Mental Health
    ◊   Community (Home care)
    ◊   Addiction
    ◊   Clinic/GP based

18. Each stream should have its **own core competences** which are **nationally identified and recognised,** in all sectors. Each stream would have its own scope of practice.

19. Currently QQI accredit educational institutions but **each institution chooses different modules** as a part of their awards; this **leads to confusion** within multidiscipline teams not fully knowing **what a HCA's actual scope of practice** is.

Recommendations Specific to Care Settings

Hospital

20. **Role of MTAs in hospitals**, is it fair to ask a person to train to be a HCA and then hire them as a MTA who can be working in catering, domestic duties or porter services ? One **wouldn't train as a nurse if they were to be doing the role of a baker**. This **title should be abolished** and HCAs should be hired for the role they have purposely trained for.

Nursing Home

21. **Staff ratio** needs to be looked at, there is no national staffing ratio placed on nursing homes. Putting staff mental and physical health at risk due to **understaffing is an issue** which is covered by core competences of HIQA

22. **Low staff ratios has an effect on the mental, physical wellbeing of a HCA**, Feeling **over worked, stressed, burnt out easily** and **result in high turnover** of staff. Their **time spent with clients is limited**, **assisting clients should be all about personal centred care,** we question is this possible when a place of work may have - 1 RGN 6 HCAs to 50 clients (Common observation by members within HCA & Carers Ireland).

23. **Low pay and time pressure** two biggest complaints in the private nursing home sector.

24. **Training of staff**, some staff have no training, others have two modules, and some are fully trained, **training to a full award should be in a training plan and ongoing CPD (**safe guarding, dementia awareness, infection control, people moving and handling, pressure sore awareness, assisted feeding, catheter and stoma care) **should be in place** always **not only when an inspection is immanent**

25. **All workers should be proficient in English language skills.**

Home Care

26. **Job description needs to be revisited**, an ad hoc mixture of tasks is at times questionable, for example home care workers being used for domestic tasks when client is physically able.

27. **Care Plans** need to be **more specific**, instead of using words like (light house work) what is light housework; many Carers are expected to do **duties outside their agreed scope of practice** which leads to issues of perceived negligence

28. It is stated in the **home care tender 2018 documents**, which are currently in operation that a **Home care worker, can work with two modules** and **must complete the remaining six out of eight to gain full qualifications**, **within eleven months of starting employment**. It also states that there **should be a training plan in place** for all home care workers, we are not finding this to be the case, **many are continuously working with two modules for a considerable length of time, with no plan to complete training.**

29. **Pay should reflect training**, for example a fully trained home care worker should earn more than those who are not fully trained, this will encourage those to complete their training

30. **Effective supervision** in the workplace **should be increased**, it allows a supervisor to **monitor the effectiveness of the training and competences as set out in the home care tender 2018 documents**

31. **Supervision in the workplace for lone workers**, paramount to career development, client/staff relationships, professional care.

32. **New staff require shadowing; more than the industry standard of 5 days**

33. All home care workers should be **proficient to converse and write the English language**.

34. **Pay rate** for those **working in private sectors**, who are usually working on **"If and when required" contracts should have a set hourly rate, across the board.**

35. **Staff using own transport/car for work purposes and not being paid for this (travelling between jobs)** this is in clear **violation** of the Court of Justice of the European Union in Case 266/14 generally referred to as the **'TYCO case'.**

36. **Staff are limited by our rigid social welfare system** and are **prevented from taking on more hours for fear of facing a sharp drop in benefits**. The **system** should b**e more flexible** and look at the **number of days** worked, **to a total hours-based system.**

37. The occupation should entice those to train, or keep their CPD going, **many qualified individuals feel that the role does not pay for the hardship of paying for college fees, and all the expenses that come with practice**. Many are being **paid more** in benefits (**on social welfare) than** they would in **a full week of work as a Home Care Carer.**

38. Currently minor mistakes, discontinuity of care and multiple care providers with little overview of patient status and development may **cause cumulative negative effects over time**.

Intellectual Disability Care & Mental Health Services

39. Analysis provided an observation which was also backed by members at HCA and Carers Ireland, this indicated that many in these fields of care do not have many full award trained staff, that prioritisation is being placed on untrained and part trained staff

Recommendations to Improve Well-being

40. **Counselling** - Due to the **emotional impact of the career** many **carers often feel they are struggling especially after the death of one of their clients**. This along with the **busy environment of the care setting** they aren't given time to **grieve or accept the death and the workload** can mean **a lot of carers** are **under a lot of stress** and are at **risk of recurrent burnout.**

41. **Physical Harm** – correct assessment and **allowance of time off** to heal is required without current discourse of letting the team down. **Selfcare is not allowed** within many private sector settings. Its **advertised but not allowed be put into practice**

42. **Addiction-** Due to the stressful environment and **stressful interactions** with preventable issues which can be **prevented by proper management and leadership**, many workers are becoming addicted to nicotine (all forms), caffeine and **negative health risks.**

43. **Work time directive for HCAs and Carers;** The **actual hours worked** within care settings vary some are working **in excess of 30 – 40 or 50 – 60 hours** due to travel commitments. Those in home care spend on average 20 – 30 hours working and find themselves driving up to 15 – 16 hours a week as well increasing their daily hours of work.

Reference List

Allwardt, D.E. (2008). Determinants of job separation and future employment choices of nursing aids employed in nursing homes. 69, ProQuest Information & Learning

Bach, S., Kessler, I. and Heron, P. (2008). Role redesign in a modernised NHS: the case of Healthcare Assistants. *Human Resource Management Journal*, 18(2), pp.171-187.

Barrington, R. (1987). *Health, medicine & politics in Ireland, 1900-1970*. Dublin, Ireland: Institute of Public Administration.

Belbin, C., Erwee, R. and Wiesner, R. (2012). Employee perceptions of workforce retention strategies in a health system. *Journal of Management & Organization*, 18(5), pp.742-760.

Berta, W., Laporte, A., Deber, R., Baumann, A. and Gamble, B. (2013). The evolving role of health care aides in the long-term care and home and community care sectors in Canada. *Human Resources for Health*, 11(1).

Boivin, D. and Boudreau, P. (2014). Impacts of shift work on sleep and circadian rhythms. *Pathologie Biologie*, 62(5), pp.292-301.

Braeseke, G., Hernández, J., Dreher, B., Birkenstock, J., Filkins, J., Preusker, U., Stöcker, G. & L., W. (2013). Final Report on The Project: Development and Coordination Of A Network of Nurse Educators and Regulators (Sanco/1/2009) To the European Commission, Dg Sanco. Bochum, Germany: Contec Gmbh.

Chamberlain, S., Gruneir, A., Hoben, M., Squires, J., Cummings, G. and Estabrooks, C. (2017). Influence of organizational context on nursing home staff burnout: A cross-sectional survey of care aides in Western Canada. *International Journal of Nursing Studies*, 71, pp.60-69.

Chambers R, Belcher J. (1994) Predicting mental health problems in general practitioners. Occup Med ;44:212–16.

Chen, L. (2010). Striking the right balance: health workforce retention in remote and rural areas. *Bulletin of the World Health Organization*, 88(5), p.323-A.

Cooper, S., Carleton, H., Chamberlain, S., Cummings, G., Bambrick, W. and Estabrooks, C. (2016). Burnout in the nursing home health care aide: A systematic review. *Burnout Research*, 3(3), pp.76-87.
Cox T, Griffiths A, Rial-Ganzalez E. (2000) Research on Work Related Stress. Nottingham: European Agency for Safety and Health at Work.

Cullinane.D, (2019). Committee of Public Accounts Debate Regarding Home Care;   Thursday, 19 Sep 2019; Available Script from: https://www.oireachtas.ie/en/debates/debate/committee_of_public_accounts/2019-09-19/2/?highlight%5B0%5D=home&highlight%5B1%5D=helps

Dated-Event, (2018), Florence Nightingale, Webpage, Available at: www.dated-event/florence-nightingale-british-nurse-crimean-war

Deloitte, (2018), Global Health Care Outlook for 2018: Working towards smart health care.
Department of Health, (2017). Working Together For Health; A National Strategic Framework for Health Workforce Planning; Dublin

Department of, H. (2017). *Committee on the Future of Healthcare, Sláinte Care Report*. Dublin: Government of Ireland.

Donnelly B, (2015) The historical development of Irish Hospitals and the importance of their records; UCD Centre for History of Medicine in Ireland, University College Dublin, Blog; Available at: http://historyofmedicineinireland.blogspot.com/2015/03/the-historical-development-of-irish.html

Drennan, J., Hegarty, J., Brady, N., Prendergast, C., Howson, V., Murphy, A. and Spilsbury, K. (2018). Provision of the Evidence to Inform the Future Education, Role and Function of Healthcare Assistants in Ireland. UCC.

Eagar, S., Cowin, L., Gregory, L. and Firtko, A. (2010). Scope of practice conflict in nursing: A new war or just the same battle?. *Contemporary Nurse*, 36(1-2), pp.86-95.

Edwards, M. (1997). The nurses' aide: past and future necessity. *Journal of Advanced Nursing*, 26(2), pp.237-245.

Feller, C. and Moore, C. (2016). Highlights in the history of the Army Nurse Corps. Washington: U.S. Army Center of Military History.

Gates, D., Ross, C. and McQueen, L. (2006). Violence against emergency department workers. *The Journal of Emergency Medicine*, 31(3), pp.331-337.

Gosseries, O., Demertzi, A., Ledoux D., Bruno, M.-A., Vanhaudenhuyse, A., Thibaut, A., Schnakers C. (2012). Burnout in healthcare workers managing chronic patients with disorders of consciousness. Brain Injury, 26(12), 1493–1499. doi:10.3109/02699052.2012.695426
Griffiths, P. & Robinson, S. (2010). Moving Forward with Healthcare Support Workforce, Regulation. *London: National Nursing Research Unit, Kings College*.

Health Service Executive (2019). Review of Role and Function of Healthcare Assistants. Dublin: HSE.

Health Service Executive, (2018). Home Support, Services for Older People, TENDER 2018; Service Specifications. HSE, Dublin.

Health Service Executive. (2018). Home care Tender Document, HSE. (Online) Available from : https://www.hse.ie/eng/services/list/4/olderpeople/service-specifications-home-support-services-2018.pages 26/27

Health Service Executive. (2019). Nuring in Ireland. Website. Available online at: http://www.nursinginireland.ie/working-in-ireland/

Hewko, S. J., Cooper, S. L., Huynh, H., Spiwek, T. L., Carleton, H. L., Reid, S. & Cummings, G. G. (2015). Invisible No More: A Scoping Review of The Health Care Aide Workforce Literature. *Bmc Nursing,* 14**,** 1-17.

Hirschfeld, R. (2000). Does Revising the Intrinsic and Extrinsic Subscales of the Minnesota Satisfaction Questionnaire Short Form Make a Difference?. *Educational and Psychological Measurement*, 60(2), pp.255-270.

Kilfedder, C. J., Power, K. G., & Wells, T. J. (2001). Burnout in psychiatric nurses. Journal of Advanced Nursing, 34(3), 383-396. https://dx.doi.org/PMID11328444
Kings College National Nursing Research Unit (2010). Moving forward with healthcare support workforce regulation. Kings College London

Legion of Mary, (2017), Our History, Webpage, Available from: https://www.legionofmary.ie/about

Marie Curie Foundation, (2018). The Carer Role and Helping Someone Cope, Webpage, Available at: www.mariecurie.org.uk/help/support/being-there/helping-someone-cope/carer-role

Marques, M., Alves, E., Queirós, C., Norton, P. and Henriques, A. (2018). The effect of profession on burnout in hospital staff. *Occupational Medicine*, 68(3), pp.207-210.

Martins, H. and Proença, M. (2014). Minnesota satisfaction questionnaire: psychometric properties and validation in a population of portuguese hospital workers. *Investigação e Intervenção em Recursos Humanos*, (3).

Mason, S., O'Keeffe, C., Carter, A., & Stride, C. (2016). A longitudinal study of well-being, confidence and competence in junior doctors and the impact of emergency medicine placements. Emergency Medicine Journal, 33(2), 91-98. https://dx.doi.org/10.1136/emermed-2014-204514

Nivel, (2018) International Standard Classification of Occupational, Website, Available at: https://www.nivel.nl/en/cc4hca/health-care-assistants

Ogińska-Bulik, N. (2006). Occupational Stress and Its Consequences in Healthcare Professionals: The Role of Type D Personality. *International Journal of Occupational Medicine and Environmental Health*, 19(2).

Preposi Cruz, J. (2016). Quality of life and its influence on clinical competence among nurses: A self-reported study. Journal of Clinical Nursing. https://dx.doi.org/10.1111/jocn.13402

Saks, M. & Allsop, J. (2007). Social Policy, Professional Regulation and Health Support Work in The United Kingdom. *Social Policy and Society,* 6**,** 165-177.

Sancassiani, F., Campagna, M., Tuligi, F., Machado, S., Cantone, E., & Carta, M. G. (2015). Organizational wellbeing among workers in mental health services: A pilot study. Clinical Practice of Epidemiology Mental Health, 11, 4-11. https://dx.doi.org/10.2174/1745017901511010004

Sattigeri. R & Kulkarni. D, (2017). Job Satisfaction in Hospital Employees: A Review of Literature; International Journal of Engineering Technology Science and Research IJETSR; V4 (2).

Schäfer. W, Kroezen. M, Hansen. J, Sermeus. W, Aszalos. Z & Batenburg. R (2016), CC4HCA - Core Competences of Healthcare Assistants in Europe. European Commission, Brussels.

SIPTU (2007). *Addressing the Health Care Crisis; Congress BRIEFING PAPER No. 10 / Summer 2007*. Dublin: SIPTU.

Small, H. (2019). Brief History of Florence Nightingale and Her Real Legacy : A Revolution in Public Health. Little, Brown Book Group Limited.

Spilsbury, K., Pender, S., Bloor, K., Borthwick, R., Atkin, K., McCaughan, D., Watt, I., Adderley, U., Wakefield, A. and McKenna, H. (2013). Support matters: a mixed methods scoping study on the use of assistant staff in the delivery of community nursing services in England. Health Services and Delivery Research, 1(3), pp.1-146.

Sutherland VJ, Cooper CL. (1993) Identifying distress among general practitioners: predictors of psychological ill-health and job satisfaction. Soc Sci Med ;37 (5):575–81.

Tepas, D. I., Barnes-Farrell, J. L., Bobko, N., Fischer, F. M., Iskra-Golec, I., & Kaliterna, L. (2004). The impact of night work on subjective reports of well-being: An exploratory study of health care workers from five nations. Revista de Saúde Pública, 38, 26-31. https://dx.doi.org/10.1590/S0034-89102004000700005

Tuisku, K., Virtanen, M., De Bloom, J., & Kinnunen, U. (2016). Cultural leisure activities, recovery and work engagement among hospital employees. Industrial Health, 54(3), 254-262. https://dx.doi.org/10.2486/indhealth.2015-0124

University of Minnesota. (2019) Minnesota Career Satisfaction Survey Manual. University of Minnesota, School of Vocational Psychology. Website, Available at: http://vpr.psych.umn.edu/instruments/msq-minnesota-satisfaction-questionnaire.

Vail, L., Bosley, S., Petrova, M. and Dale, J. (2010). Healthcare assistants in general practice: a qualitative study of their experiences. Primary Health Care Research & Development,12(01), pp.29-41.

Van Laar, D., Edwards, J. and Easton, S. (2007). The Work-Related Quality of Life scale for healthcare workers. *Journal of Advanced Nursing*, 60(3), pp.325-333.

Wan, H., Goodkind, D., & Kowal, P. (2016). International population re-ports, an aging world: 2015. Washington, DC, USA: U.S. Government Publishing Office

World Health Organization, (2010), Classification of Health Workforce Statistics Report, Genoa

APPENDICES

APPENDIX A
Research Plan

The Research Process

Created for the HCA & Carers Study 2019

2019

Pre Study Period

We are Here
Ethical Review with UCD Research Dept. (Await Decision)
Full Team Made & All aware of Goal! Questionnaire selection Currently Happening- premade but moulded to our needs.

- Advertise the Study on Group
- The Team work together to mould questions and decide on wording.
- Team members Will learn about how research happens regarding Data Mngt

- Agree on set population size we want
- UCD to advertise the study
- Agree on terminology
- Set a LIVE date for when the study goes live online.
- Agree on basic information – Learn about identifiers and mitigation of risk

Study Preperation

Create the Study Instrument
- Using decided Survey
- Data management: Making Online Survey & having System in place
- Data Dictionary to be made
- Agree on Data coding – Really means agree on the choices available to Responders

Create The Google Form ie. The Survey
Create a Video for our Public & Private group Asking Carers & HCAs to do the Study.
Media Run : Get the Buzz going! Maybe a give away of a mug. Twitter and College Informatics

Test the Survey Pre Release
If OKAY -

Data Collection Time

Continue Until we get 1000 Responses (Min)

Data Management Post Study

Data Cleaning:
Extract the data from google forms and clean the data removing any duplicates.
Transcription:
Transcribe into SPSS – Statistical Suite.
Data management Re: values and coding

Run Stats:
- Report % and Frequencies to the Team – Baselines

Analysis

Run Stats:
Tests of independence and Dependence; Association; Correlations; ANOVA and Logistic Regression to see effect;

Write Up Papers & Report

Meet up or video Conference
- Interpretation of Results
- Agreed Jobs Re: Full Report Write Up for the Association
- Preparation of Papers = different but related papers – Different viewpoints

The Check Up & Submission

- Full report Triple Checked for errors and omissions
- Papers Checked Pre Submission to different Journals
- Await Decision – wait or get funding for quicker publishing

Published

127

APPENDIX B

Ethics Confirmation

Thank you for notifying the Human Research Ethics Committee – Sciences (HREC-LS) of *your declaration* that you are exempt from a full ethical review. Should the nature of your research change and thereby alter your exempt status you will need to submit an application form for full ethical review. Please note for future correspondence regarding this study and its exemption that your Research Ethics Exemption Reference Number (REERN) is: **LS-E-19-75-Conyard-Codd. This exemption from full ethical review is being accepted by the Office of Research Ethics on the condition that you observe the following:**

- **External REC Approval and/or Permission to Access/Recruit Human Participants/or their Data:** *(if applicable)* Please be aware that recruitment of participants or data collection should not begin until written permissions are secured from external organisations/individuals. I note that you have permission to access participants through the HCA and *Carers Ireland* and have provided the written permission.

- **UCD Insurance Requirement:** I confirm that the public liability insurance cover is in place for this project.

- **Researcher Duty of Care to Participants:** please ensure that ethical best practice is considered and applied to your research projects. You should ensure that participants are aware of what is happening to them and to their data whether a study is de-identified or not. All researchers have a duty of care to their participants who have the right to be informed, the right to consent to participate and the right to withdraw from the study.

Any additional documentation should be emailed to exemptions.ethics@ucd.ie quoting your assigned reference number (provided above) in the subject line of your email.

Please note that your research does not require a committee review and also note that this is an acknowledgment of your declared exemption status. All Exemptions from Full Review are subject to Research Ethics Compliance Review.

APPENDIX C
Study Advertisement

National Republic of Ireland Study on Health Care Assistants & Professional Carers

In a bid to represent the Irish population of Health Care Assistants (HCAs) and Professional Carers, HCA & Carers Ireland have developed links with professionals and professional bodies within the area of Epidemiology, Biostatistics, Nursing, Clinical and Health Services Research and Public Health. These connections allow for research to be completed in a respective manner; which is anonymous and valid.

This is a cross-sectional study to account for the different areas in which HCAs and Professional Carers work in (Acute Hospitals; Emergency Care, Nursing Homes, Home Care, Day Care Services and Charitable Organisations).

No Study has **EVER looked At IRISH Carers and HCAs!**
This is your **Opportunity** for you to **tell the World and the change makers** precisely what **you need** and what is happening to you! Facebook only goes so Far. This Study **Costs Nothing** to do other than **a few minutes** of your time !

Why are we doing Research ?

This research is greatly needed and is key to present a current picture of what is happening to our HCAs and Carers in Ireland. This project will help our association gain track as being a **professional body** for us all, it will also gain us important insight in which we can use to draw up a report to show other bodies (like the HSE, Department of Health)
What the frontline truly is! We will also advice government agencies on the results of this piece of research regarding what **OUR Profession** needs to prosper!

What will the Research look at ?

- **Basic information, like your Gender and Type of Work**
- **Are you Satisfied in your career?**
- **What Skills do you use**
- **What Skills have your learned by course or by practice**
- **Your Health – physical, Mental health and Burn Out**

WHEN?

The study will be released on the **27th of May 2019 till the 10th of June**

This **Survey** is **Totally Anonymous** – your anonymous information will **not be shared**, your name is not be needed, Nor will your date of birth nor will company names be used. We abide by GDPR and UCD Ethical Research Guidelines. **You can complete the Survey and know you are safe!** For a Full list of the Research Team you can contact the PI or HCA & Carers Ireland CEO **Allison@hca.ie** .
The Online Survey Link will be released on the Study Start date!

This Study has been
Kindly been assisted by RSPH

This Study is Kindly
Promoted by HSE HR

For more information regarding this study you can contact the Principle Investigator **karl.conyard@ucd.ie**

APPENDIX D

Participant Information Leaflet

HCA & Professional Carers an Untapped Trained Resource; an Irish Cross-sectional Study

Collaboration between UCD CSTAR & HCA & Carers Ireland

*Required

Welcome

We are delighted and grateful to you for giving up some of your valuable time to help with our research project.

As you know, In a bid to represent the Irish population of Health Care Assistants (HCAs) and Professional Carers, HCA & Carers Ireland have come together with UCD CSTAR to Create this study!

Research always hopes to translate change and collective feelings into practice; your voice helps this process!
No Study has EVER looked at IRISH Carers and HCA's!

This is an Opportunity for you to tell the Government and the change makers precisely what you want and what is happening to you! Facebook only goes so Far. This study has 4 Parts; Firstly some basic information; then we will ask you about your Career/Job Satisfaction; then we will ask about your general health/Well being. Finally we ask about questions relating to change. This Study Costs Nothing to do other than 7 minutes of your time ! We do a lot for you All and it is amazing to see you here supporting us!

The information you provide will remain strictly confidential and inline with GDPR guidelines; Data Protection Guidelines and UCD Research Practices. Information you give is in an anonymous format so we do not know who you are nor can anyone know who you are. No employer nor company will ever get the information you provide here. No Employer can control you or tell you not to do this study either ; this is a protected academic study and we want YOU to be SAFE knowing that all the information you give is protected in every way possible! By proceeding you give your permission for the data to be included in our analysis.
All information will be shredded and deleted at Study end.

If you have any issues or any questions about this research project
please email the PI at :   karl.conyard@ucd.ie

or HCA and Carers Ireland at : allison@hca.ie

Note: Yes/ No Questions Only Pick one option there is no Maybe

Thank you again,
The Research Team

APPENDIX E
Literature Search
Strategy

Literature Search Strategy

Database	UCD One Search	Google Scholar	PubMed	OVID Medline	Other*
Search Terms	Healthcare Assitant AND Career Satisfaction ; CNA AND Career Satisfaction; Unregistered Healthcare Workers; Care Aids; LPNs; HCA Core Competencies; Extrinsic Satisfatcion in Healthcare; workers; Burnout in Healthcare workers; Hisotry of healthcare assistants; EDucation of unreglated healthcare workers	Healthcare Assitant AND Career Satisfaction ; CNA AND Career Satisfaction; Unregistered Healthcare Workers; Care Aids; LPNs; HCA Core Competencies; Intrinsic Satisfaction in Healthcare	Healthcare Assitant AND Career Satisfaction ; CNA AND Career Satisfaction; Unregistered Healthcare Workers; Care Aids; LPNs; HCA Core Competencies; General Wellbeing in Healthcare workers; Burnout	Healthcare Assitant AND Career Satisfaction ; CNA AND Career Satisfaction; Unregistered Healthcare Workers; Care Aids; LPNs; HCA Core Competencies; General Wellbeing in Healthcare workers; Burnout	Review of Role Healthcare Assistants; HSE reports; QQI Reports; EU reports; EC reports
Number of Results	Results: 1250	Results: 230	Results: 150	Results: 80	Results: 25
Scaling Down	Unrelated Topic -800 Different Tool used -50 Roles were not comparable -82 Unclear Role Description -150 History outside context -50 Different Language used -100	Unrelated Topic -95 Different Language used -80 Unclear Methodology -47	Unrelated Topic -50 Bias noted -40 Roles were not comparable -30 Published Pre 1991 -22	Unrelated Topic -30 Published Pre 1991 -20 Bias noted -15 Unclear Methodology -6	Unrelated Topic -10 Document Outdated -5 No Focus on HCA -3
Usable Resource	=18	=8	=8	=9	=8

* Other includes Literature not pertaining to research example include Governmental Reports; Insitution Reviews etc.

APPENDIX F
Case Report Form

Section One

1. 1.What is your Sex? *
   Tick all that apply.

   ☐ Male

   ☐ Female

2. 2.What is your Age Range? *
   Tick all that apply.

   ☐ Under 18 Yrs of Age

   ☐ 18 - 21 Yrs of Age

   ☐ 22 - 30 Yrs of Age

   ☐ 31 - 45 Yrs of age

   ☐ 46 - 60 Yrs of Age

   ☐ 61 - 70 Yrs of Age

   ☐ Over 70 Yrs of Age

3. 3. Which Provence do you live in? *
   Tick all that apply.

   ☐ Leinster

   ☐ Munster

   ☐ Connaught

   ☐ Ulster

4. 4. Please Specify Area Type *
   Tick all that apply.

   ☐ Rural (Country-side)

   ☐ Urban (City)

   ☐ Suburban (Town or Village)

5. 5. Do you work more than one Caring job? *
   Tick all that apply.

   ☐ Yes

   ☐ No

6. 6. **What Area of Care do you Mainly work in?** *

Tick all that apply.

☐ Hospital

☐ Nursing Home

☐ Home Care

☐ Day Centre Care

☐ Intellectual Disability Residential Care

☐ Hospice Care

☐ Mental Health Care

☐ Addiction Services

☐ GP Practice

☐ Working within a Charitable Organisation (ex. Irish Wheelchaier Soc)

☐ Clinic

7. 7. **What Industry do you Work in?** *

Tick all that apply.

☐ Public

☐ Public Funded Private

☐ Private

☐ Charity

☐ Agency Based

8. 8. **Do you Hold a Full Award** *

Tick all that apply.

☐ Yes

☐ No

9. 9. **Should a HCA with a Full Award be Paid More than Someone without a Full Award** *

Tick all that apply.

☐ Yes

☐ No

10. 10. **Are you a Senior HCA/ Carer (More than 10 Years in Practice OR Been educated to a level 7-10 NFQ)** *

Tick all that apply.

☐ Yes

☐ No

11. 11.What Skills do you use in your Practice on a Regular Basis? (Tick all that apply) *

Tick all that apply.

- [ ] Notation – Clinical notes – Carers Notes
- [ ] Clinical Observation (Taking Obs – BP, HR, Resps, Sp02 & Temp)
- [ ] IV Care (incudes IV Flushes & Removing old Fluid bags)
- [ ] IV Access – Cannulation and / or Phlebotomy (taking blood)
- [ ] Fluid Balance
- [ ] Medication Administration (incl. IM drug admin)
- [ ] Physical Examination and/or Critical Care
- [ ] Activities of Daily Living Training
- [ ] Dementia Specialist Skills (Post Dementia Awareness or Sonas)
- [ ] Palliative Specialist Training & Care
- [ ] Diabetes Training & Care
- [ ] Epilepsy Training & Care
- [ ] Pre and/or Post Operative Surgical Care
- [ ] Intellectual Disability Training / Care
- [ ] Physical Disability Training / Care
- [ ] Addiction Training / Care
- [ ] Mental Health Care
- [ ] Life Skills Training
- [ ] Driving
- [ ] Any Specialist Training

12. 12. What Skills have you Trained in? (Tick all that apply) (Trained in QQI course; Work or Personal Self Improvement) *

Tick all that apply.

- [ ] Notation – Clinical notes – Carers Notes
- [ ] Clinical Observation (Taking Obs – BP, HR, Resps, Sp02 & Temp)
- [ ] IV Care (incudes IV Flushes & Removing old Fluid bags)
- [ ] IV Access – Cannulation and / or Phlebotomy (taking blood)
- [ ] Fluid Balance
- [ ] Medication Administration (incl. IM drug admin)
- [ ] Physical Examination and/or Critical Care
- [ ] Activities of Daily Living Training
- [ ] Dementia Specialist Skills (Post Dementia Awareness or Sonas)
- [ ] Palliative Specialist Training & Care
- [ ] Diabetes Training & Care
- [ ] Epilepsy Training & Care
- [ ] Pre and/or Post Operative Surgical Care
- [ ] Intellectual Disability Training / Care
- [ ] Physical Disability Training / Care
- [ ] Addiction Training / Care
- [ ] Mental Health Care
- [ ] Life Skills Training
- [ ] Driving
- [ ] Any Specialist Training

13. 14. Does your employer allow you or give you opportunities to up skill? *

Tick all that apply.

- [ ] Yes
- [ ] No

14. 15. Does your Employer help or Hinder you (make your life hard) in your role?

Tick all that apply.

- [ ] Yes (Hinder)
- [ ] No (Help)

15. 16. Do you believe that your work effects your health and wellbeing *

Tick all that apply.

- [ ] Yes
- [ ] No

140

For each question, choose the answer that best describes how you have felt and how things have been going for you during the past month.
Pick only one answer per Question

17. **1.How have you been feeling in general? ***

    Tick all that apply.

    ☐ 6. In Excelent Spirits

    ☐ 5. In Very Good Spirits

    ☐ 4. In Good Spirits Mostly

    ☐ 3. I've Been Up And Down In Spirits A Lot

    ☐ 2. In Low Spirits Mostly

    ☐ 1. In Very Low Spirits

18. **2. Have you been bothered by nervousness or your "nerves"? ***

    Tick all that apply.

    ☐ 1. Extremely so, to the point where I could not work or take care of things

    ☐ 2. Very much so

    ☐ 3. Quite a bit

    ☐ 4. Some - Enough to bother me

    ☐ 5. A little

    ☐ 6. Not at all

19. **3. Have you been in firm control of your behaviour, thoughts, emotions, or feelings? ***

    Tick all that apply.

    ☐ 6. Yes, definitely so

    ☐ 5. Yes, for the most part

    ☐ 4. Generally so

    ☐ 3. Not too well

    ☐ 2. No, and I am somewhat disturbed

    ☐ 1. No, and I am very disturbed

20. **4. Have you felt so sad, discouraged, hopeless, or had so many problems that you wondered if anything was worthwhile? ***

    Tick all that apply.

    ☐ 1. Extremely so—to the point I have just about given up

    ☐ 2. Very much so

    ☐ 3. Quite a bit

    ☐ 4. Some-enough to bother me

    ☐ 5. A little bit

    ☐ 6. Not at all

141

21. 5. Have you been under or felt you were under any strain, stress, or pressure? *
Tick all that apply.

☐ 1. Yes-almost more than I could bear

☐ 2. Yes-quite a bit of pressure

☐ 3. Yes-some, more than usual

☐ 4. Yes-some, but about usual

☐ 5. Yes a Little

☐ 6. Not at all

22. 6. How happy, satisfied, or pleased have you been with your personal life? *
Tick all that apply.

☐ 6. Extremely happy-couldn't have been more satisfied or pleased

☐ 5. Very Happy

☐ 4. Fairly Happy

☐ 3. Satisfied - Pleased

☐ 2. Somewhat Dissatisfied

☐ 1. Very Dissatisfied

23. 7. Have you had reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory? *
Tick all that apply.

☐ 6. Not at all

☐ 5. Only a little

☐ 4. Some, but not enough to be concerned

☐ 3. Some, and I've been a little concerned

☐ 2. Some, and I am quite concerned

☐ 1. Much, and I'm very concerned

24. 8. Have you been anxious, worried, or upset? *
Tick all that apply.

☐ 1. Extremely so-to the point of being sick, or almost sick

☐ 2. Very much So

☐ 3. Quite a bit

☐ 4. Some - enough to bother me

☐ 5. A little bit

☐ 6. Not at all

25. 9. Have you been waking up fresh and rested? *
Tick all that apply.

☐ 6. Every day

☐ 5. Mostly every day

☐ 4. Fairly often

☐ 3. Less than half the time

☐ 2. Rarely

☐ 1. None of the Time

26. **10. Have you been bothered by any illness, bodily disorder, pain, or fears about your health?** *
    Tick all that apply.

    ☐ 1. All the time
    ☐ 2. Most of the time
    ☐ 3. A good bit of the time
    ☐ 4. Some of the time
    ☐ 5. A little of the time
    ☐ None of the time

27. **11. Has your daily life been full of things that are interesting to you?** *
    Tick all that apply.

    ☐ 1. All the time
    ☐ 2. Most of the time
    ☐ 3. A good bit of the time
    ☐ 4. Some of the time
    ☐ 5. A little of the time
    ☐ None of the time

28. **12. Have you felt downhearted and blue?** *
    Tick all that apply.

    ☐ 1. All the time
    ☐ 2. Most of the time
    ☐ 3. A good bit of the time
    ☐ 4. Some of the time
    ☐ 5. A little of the time
    ☐ None of the time

29. **13. Have you been feeling emotionally stable and sure of yourself?** *
    Tick all that apply.

    ☐ 1. All the time
    ☐ 2. Most of the time
    ☐ 3. A good bit of the time
    ☐ 4. Some of the time
    ☐ 5. A little of the time
    ☐ None of the time

30. **14. Have you felt tired, worn out, used up, or exhausted?** *
    Tick all that apply.

    ☐ 1. All the time
    ☐ 2. Most of the time
    ☐ 3. A good bit of the time
    ☐ 4. Some of the time
    ☐ 5. A little of the time
    ☐ None of the time

31. 15.How concerned or worried about your health have you been? *

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Very Concerned	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Not Concerned at all

32. 16.How relaxed or tense have you been? *

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Very Tense	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Relaxed

33. 17. How much Energy and Vitality have you felt? *

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Weary - No Energy	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Energetic - Filled with Vitality

34. 18. How depressed or cheerful have you been? *

Mark only one oval.

	0	1	2	3	4	5	6	7	8	9	10	
Very Depressed	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Very Cheerful

Section 3 Job / Career Satisfaction

This is the last section
This section looks at how happy you are currently in your caring role
Please pick one answer per questions

"In my current job as a HCA / Carer"

35. 1. Being able to keep busy all the time *

Mark only one oval.

◯ Very Dissatisfied

◯ Dissatisfied

◯ I Can't Decide/Don't Know

◯ Satisfied

◯ Very Satisfied

36. 2. The chance to work alone on the job *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

37. 3. The chance to do different things from time to time. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

38. 4. The chance to be "somebody" in the community. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

39. 5. The way my boss handles his/her workers. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

40. 6. The competence of my supervisor in making decisions. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

41. 7. Being able to do things that don't go against my conscience. *

Mark only one oval.

- ⬭ Very Dissatisfied
- ⬭ Dissatisfied
- ⬭ I Can't Decide/Don't Know
- ⬭ Satisfied
- ⬭ Very Satisfied

42. 8. The way my job provides for steady employment. *

Mark only one oval.

- ⬭ Very Dissatisfied
- ⬭ Dissatisfied
- ⬭ I Can't Decide/Don't Know
- ⬭ Satisfied
- ⬭ Very Satisfied

43. 9. The chance to do things for other people. (Caring) *

Mark only one oval.

- ⬭ Very Dissatisfied
- ⬭ Dissatisfied
- ⬭ I Can't Decide/Don't Know
- ⬭ Satisfied
- ⬭ Very Satisfied

44. 10. The chance to tell people what to do. *

Mark only one oval.

- ⬭ Very Dissatisfied
- ⬭ Dissatisfied
- ⬭ I Can't Decide/Don't Know
- ⬭ Satisfied
- ⬭ Very Satisfied

45. 11. The chance to do something that makes use of my abilities. *

Mark only one oval.

- ⬭ Very Dissatisfied
- ⬭ Dissatisfied
- ⬭ I Can't Decide/Don't Know
- ⬭ Satisfied
- ⬭ Very Satisfied

46. **12. The way company policies are put into practice. ***

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

47. **13. My pay and the amount of work I do. ***

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

48. **14. The chances for advancement on this job. ***

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

49. **15. The freedom to use my own judgment. ***

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

50. **16. The chance to try my own methods of doing the job. ***

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

51. 17. The working conditions. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

52. 18. The way my co-workers get along with each other. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

53. 19. The praise I get for doing a good job. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

54. 20. The feeling of accomplishment I get from the job. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

55. 21. Being able to do the job without feeling it is morally wrong. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

56. 22. The policies and practices toward employees of my company. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

57. 23. The way my supervisor and I understand each other. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

58. 24. The chance to be of service to people. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

59. 25. Company policies and the way in which they are administered. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

60. 26. The way my boss backs up his/her employees (with top management). *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

61. 27. The way my boss takes care of the complaints of his/her employees. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

62. 28. How steady my job is. *

Mark only one oval.

- ◯ Very Dissatisfied
- ◯ Dissatisfied
- ◯ I Can't Decide/Don't Know
- ◯ Satisfied
- ◯ Very Satisfied

Section 4. Change

This Section looks at possible changes in our system do you agree?

63. 1. Do you believe that there should be a Licence System set up to stop Bad HCAs / Carers repeating bad practice? *

Tick all that apply.

- ☐ Yes
- ☐ No

64. 2. Do you feel you are listened to by management if you have a concern? *

Tick all that apply.

- ☐ Yes
- ☐ No

65. 3. Have you been faced by any of the following issues in your practice? (Tick all that Apply) *

Tick all that apply.

- ☐ Staffing
- ☐ Pay rate (Min Wage)
- ☐ Issues moving from one job to another (references & training certification)
- ☐ Travel fees (Fuel allowances for Home care & Community Care)

Thank You !

We at HCA & Carer's Ireland and UCD CSTAR would like to thank you for your opinions given on this survey.

Results will be made available to the association group members. We would like to remind you that all of the data you have provided us is anonymous and the data will be disposed of safely after the study is completed!

APPENDIX G

Data Dictionary

	Data Dictionary			Investigator - HCA_QCarer_Epi Consortium		
	Project: National Questionnaire on HCA & Carer Satisfaction and Health					Date: 16/06/2019
Abbrev	Full name of variable	Definition of variable	Source	Data Type	Coding Options	
ID	Identification code	Participant Identification code	Survey	n/a	n/a	
Sex	Sex	Sex of Respondent	Survey	Nominal	1=Male; 2=Female; 99=Missing	
Age_GP	Age Group	Age Group of Respondent	Survey	Nominal	1=<18-21 yrs; 2=22-30yrs; 3= 31-45yrs; 4=46-60yrs; 5=61-70yrs; 6= >70yrs; 99=Missing	
Prov	Provence	Provence of Respondent	Survey	Nominal	1= Leinster; 2=Ulster; 3=Connaught; 4=Munster; 99=Missing	
AreaT	Area Type	Area Type of Respondent	Survey	Nominal	1= Rural; 2=Suburban; 3=Urban; 99=Unknown	
Care2	Care two	Do you have more than one Care job	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_Hosp	Area Hospital	Area Hospital	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_NH	Area Nursing Home	Area Nursing Home	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_Home	Area Home Care	Area Home Care	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_DC	Area Day Care Centre	Area Day Care Centre	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_CO	Area Charity Organisations	Area Charity Organisations	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_ID	Area Intellectual Disabilities	Area Intellectual Disabilities	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_AD	Area Addiction services	Area Addiction services	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Area_Men	Area Mental Health	Area Mental Health	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Sec_Pub	Sector Public	Sector Public	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Sec_PFP	Sector Public Funded Private	Sector Public Funded Private	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Sec_Agy	Sector Agency	Sector Agency	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Sec_Pri	Sector Private	Sector Private	Survey	Nominal	1=Yes; 2=No; 99=Missing	
Sec_ChOrg	Sector Charitable Organisation	Sector Charitable Organisation	Survey	Nominal	1=Yes; 2=No; 99=Missing	

FAward	Full Award	Do you Have a Full Award	Survey	Nominal	1=Yes; 2=No; 99=Missing
Faward_P	Full Award Pay	Should Full Awards be Paid more?	Survey	Nominal	1=Yes; 2=No; 99=Missing
SnrHCA	Senior HCA	Are you a Senior HCA/Carer	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_note	Skill Practice Carers Note	Skill Practice Carers Note	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_obs	Skill Practice Observation	Skill Practice Observation	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_ivc	Skill Practice IV Care	Skill Practice IV Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_iva	Skill Practice IV Access	Skill Practice IV Access	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_fb	Skill Practice Fluid Balance	Skill Practice Fluid Balance	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Med Ad	Skill Practice Medication Administration	Skill Practice Medication Administration	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Phy Exam_CC	Skill Practice Physical Examination and Critical Care	Skill Practice Physical Examination and Critical Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_ADL s	Skill Practice Activities of Daily Living	Skill Practice Activities of Daily Living	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Dem	Skill Practice Dementia Care	Skill Practice Dementia Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Pall	Skill Practice Palliative Care	Skill Practice Palliative Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Diab	Skill Practice Diabetes Care	Skill Practice Diabetes Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Epil	Skill Practice Epilepsy Care	Skill Practice Epilepsy Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_OpC are	Skill Practice Pre & Post Operative Care	Skill Practice Pre & Post Operative Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_ID	Skill Practice Intellectual Disabilities Care	Skill Practice Intellectual Disabilities Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Phy D	Skill Practice Physical Disabilities Care	Skill Practice Physical Disabilities Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Ad	Skill Practice Addiction Care	Skill Practice Addiction Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Men	Skill Practice Mental Health Care	Skill Practice Mental Health Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Life	Skill Practice Life Skills	Skill Practice Life Skills	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_Driv e	Skill Practice Driving	Skill Practice Driving	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_P_AST	Skill Practice Any Other Specialist Training	Skill Practice Any Other Specialist Training	Survey	Nominal	1=Yes; 2=No; 99=Missing

Sk_T_note	Skill Training Carers Note	Skill Training Carers Note	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_obs	Skill Training Observation	Skill Training Observation	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_ivc	Skill Training IV Care	Skill Training IV Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_iva	Skill Training IV Access	Skill Training IV Access	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_fb	Skill Training Fluid Balance	Skill Training Fluid Balance	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Med Ad	Skill Training Medication Administration	Skill Training Medication Administration	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Phy Exam_CC	Skill Training Physical Examination and Critical Care	Skill Training Physical Examination and Critical Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_ADL s	Skill Training Activities of Daily Living	Skill Training Activities of Daily Living	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Dem	Skill Training Dementia Care	Skill Training Dementia Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Pall	Skill Training Palliative Care	Skill Training Palliative Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Diab	Skill Training Diabetes Care	Skill Training Diabetes Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Epil	Skill Training Epilepsy Care	Skill Training Epilepsy Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_OpC are	Skill Training Pre & Post Operative Care	Skill Training Pre & Post Operative Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_ID	Skill Training Intellectual Disabilities Care	Skill Training Intellectual Disabilities Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Phy D	Skill Training Physical Disabilities Care	Skill Training Physical Disabilities Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Ad	Skill Training Addiction Care	Skill Training Addiction Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Men	Skill Training Mental Health Care	Skill Training Mental Health Care	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Life	Skill Training Life Skills	Skill Training Life Skills	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_Driv e	Skill Training Driving	Skill Training Driving	Survey	Nominal	1=Yes; 2=No; 99=Missing
Sk_T_AST	Skill Training Any Other Specialist Training	Skill Training Any Other Specialist Training	Survey	Nominal	1=Yes; 2=No; 99=Missing
Emp_opp	Employer Opportunities to Upskill	Does your employer allow you or give you opportunities to up skill?	Survey	Nominal	1=Yes; 2=No; 99=Missing

Emp_HH	Employer Help or Hinder you	Does your Employer help or Hinder you (make your life hard) in your role?	Survey	Nominal	1=Yes; 2=No; 99=Missing
W_EHW	Work Effects Health & Well-being	Do you believe that your work effects your health and wellbeing	Survey	Nominal	1=Yes; 2=No; 99=Missing
YrsHCA	Years as a HCA	How Many years have you been a professional Carer or Healthcare Assistant? (Please insert just number of years example. 2.0 = 2 years)	Survey	String	Enter in Years; 999=Missing
GHS_1Feel IG	General Health Scale 1	1.How have you been feeling in general?	Survey	Ordinal	6= In excellent spirits; 5= In very good spirits; 4= In good spirits mostly; 3= I've been up and down in spirits a lot; 2= In low spirits mostly; 1= In very low spirits; 9= Missing
GHS_2Ner v	General Health Scale 2	2. Have you been bothered by nervousness or your "nerves"?	Survey	Ordinal	1=Extremely so, to the point where I could not work or take care of things; 2= Very much so; 3= Quite a bit; 4= Some-enough to bother me; 5= A little; 6= Not at all; 9= Missing
GHS_3Fir mCont	General Health Scale 3	3. Have you been in firm control of your behaviour, thoughts, emotions, or feelings?	Survey	Ordinal	6= Yes, definitely so; 5= Yes, for the most part; 4= Generally so; 3= Not too well; 2= No, and I am somewhat disturbed; 1= No, and I am very disturbed; 9=Missing
GHS_4Sad	General Health Scale 4	4. Have you felt so sad, discouraged, hopeless, or had so many problems that you wondered if anything was worthwhile?	Survey	Ordinal	1=Extremely so, to the point I have just about given up; 2= Very much so; 3= Quite a bit; 4= Some-enough to bother me; 5= A little; 6= Not at all; 9= Missing
GHS_5Stre ss	General Health Scale 5	5. Have you been under or felt you were under any strain, stress, or pressure?	Survey	Ordinal	1=Yes-almost more than I could bear; 2=Yes-quite a bit of pressure; 3=Yes-some, more than usual; 4=Yes-some, but about usual; 5=Yes-a little; 6=Not at all; 9=Missing

GHS_6Hap py	General Health Scale 6	6. How happy, satisfied, or pleased have you been with your personal life?	Survey	Ordinal	6= Extremely happy-couldn't have been more satisfied or pleased; 5= Very happy; 4= Fairly happy; 3= Satisfied—pleased; 2= Somewhat dissatisfied; 1= Very dissatisfied; 9=Missing
GHS_7Los Cont	General Health Scale 7	7. Have you had reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory?	Survey	Ordinal	6= Not at all;5= Only a little; 4= Some, but not enough to be concerned; 3= Some, and I've been a little concerned; 2= Some, and I am quite concerned; 1= Much, and I'm very concerned; 9=Missing
GHS_8Anx	General Health Scale 8	8. Have you been anxious, worried, or upset?	Survey	Ordinal	1=Extremely so-to the point of being sick, or almost sick; 2=Very much so; 3=Quite a bit; 4=Some-enough to bother me; 5=A little bit; 6=Not at all; 9=Missing
GHS_9Fre sh	General Health Scale 9	9. Have you been waking up fresh and rested?	Survey	Ordinal	6=Every day; 5=Most every day; 4=Fairly often; 3=Less than half the time; 2=Rarely; 1=None of the time(over); 9=Missing
GHS_10ill	General Health Scale 10	10. Have you been bothered by any illness, bodily disorder, pain, or fears about your health?	Survey	Ordinal	1=All the time; 2=Most of the time; 3=A good bit of the time; 4=Some of the time; 5=A little of the time; 6=None of the time; 9=Missing
GHS_11Int	General Health Scale 11	11. Has your daily life been full of things that are interesting to you?	Survey	Ordinal	6=All the time; 5=Most of the time; 4=A good bit of the time; 3=Some of the time; 2=A little of the time; 1=None of the time; 9=Missing
GHS_12Do wn	General Health Scale 12	12. Have you felt downhearted and blue?	Survey	Ordinal	1=All of the time; 2=Most of the time; 3=A good bit of the time; 4=Some of the time; 5=A little of the time; 6=None of the time; 9=Missing
GHS_13E moS	General Health Scale 13	13. Have you been feeling emotionally stable and sure of yourself?	Survey	Ordinal	6=All of the time; 5=Most of the time; 4=A good bit of the time; 3=Some of the time; 2=A little of the time; 1=None of the time; 9=Missing

GHS_14Tired	General Health Scale 14	14. Have you felt tired, worn out, used up, or exhausted?	Survey	Ordinal	1= All of the time; 2= Most of the time; 3= A good bit of the time; 4= Some of the time; 5= A little of the time; 6= None of the time; 9=Missing
GHS_15CWH	General Health Scale 15	15.How concerned or worried about your health have you been?	Survey	Scale	10 Not Concerned at all – 0 Very Concerned
GHS_16RT	General Health Scale 16	16.How relaxed or tense have you been?	Survey	Scale	10 Very Relaxed --- 0 Very Tense
GHS_17EV	General Health Scale 17	17. How much Energy and Vitality have you felt?	Survey	Scale	0 No Energy at all/weariness -- 10 Very Energetic and filled with Vitality
GHS_18DC	General Health Scale 18	18. How depressed or cheerful have you been?	Survey	Scale	0 Very Depressed ----- 10 Very Cheerful
MSS_1busy	Minnesota Satisfaction Scale 1	1. Being able to keep busy all the time	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_2Alo	Minnesota Satisfaction Scale 2	2. The chance to work alone on the job	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_3difT	Minnesota Satisfaction Scale 3	3. The chance to do different things from time to time.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_4Com	Minnesota Satisfaction Scale 4	4. The chance to be "somebody" in the community.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_5Boss	Minnesota Satisfaction Scale 5	5. The way my boss handles his/her workers.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_6Sup	Minnesota Satisfaction Scale 6	6. The competence of my supervisor in making decisions.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_7CompSup	Minnesota Satisfaction Scale 7	7. Being able to do things that don't go against my conscience.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_8Steady	Minnesota Satisfaction Scale 8	8. The way my job provides for steady employment.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing

MSS_9Care	Minnesota Satisfaction Scale 9	9. The chance to do things for other people. (Caring)	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_10Tell	Minnesota Satisfaction Scale 10	10. The chance to tell people what to do.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_11Abil	Minnesota Satisfaction Scale 11	11. The chance to do something that makes use of my abilities.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_12Pol	Minnesota Satisfaction Scale 12	12. The way company policies are put into practice.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_13Amon	Minnesota Satisfaction Scale 13	13. My pay and the amount of work I do.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_14Adv	Minnesota Satisfaction Scale 14	14. The chances for advancement on this job.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_15Judge	Minnesota Satisfaction Scale 15	15. The freedom to use my own judgment.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_16Meth	Minnesota Satisfaction Scale 16	16. The chance to try my own methods of doing the job.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_17Cond	Minnesota Satisfaction Scale 17	17. The working conditions.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_18Co-w	Minnesota Satisfaction Scale 18	18. The way my co-workers get along with each other.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_19Gjob	Minnesota Satisfaction Scale 19	19. The praise I get for doing a good job.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_20AccJ	Minnesota Satisfaction Scale 20	20. The feeling of accomplishment I get from the job.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing

MSS_21M or	Minnesota Satisfaction Scale 21	21. Being able to do the job without feeling it is morally wrong.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_22Pp ec	Minnesota Satisfaction Scale 22	22. The policies and practices toward employees of my company.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_23Su pUn	Minnesota Satisfaction Scale 23	23. The way my supervisor and I understand each other.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_24Se rv	Minnesota Satisfaction Scale 24	24. The chance to be of service to people.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_25Po l_Adm	Minnesota Satisfaction Scale 25	25. Company policies and the way in which they are administered.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_26Bo ss_Back	Minnesota Satisfaction Scale 26	26. The way my boss backs up his/her employees (with top management).	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_27Bo ss_Comp	Minnesota Satisfaction Scale 27	27. The way my boss takes care of the complaints of his/her employees.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
MSS_28St eady	Minnesota Satisfaction Scale 28	28. How steady my job is.	Survey	Ordinal	1= Very Satisfied; 2=Satisfied; 3=Cant decide/Between; 4=Dissatisfied; 5=Very Dissatisfied; 9=Missing
Lisc_Nat	Liscence National	Do you believe that there should be a Licence System set up to stop Bad HCAs / Carers repeating bad practice?	Survey	Nominal	1=Yes; 2=No; 99=Missing
LisManage	Listened by Management	Do you feel you are listened to by management if you have a concern?	Survey	Nominal	1=Yes; 2=No; 99=Missing
Issue_Staff	Issues regarding Staffing Levels	Have you suffered from Staffing Levels	Survey	Nominal	1=Yes; 2=No; 99=Missing
Issue_Mov e	Issues regarding moving from one job to another	Have you suffered from Moving from one job to another	Survey	Nominal	1=Yes; 2=No; 99=Missing
Issue_Trav el	Issues regarding Traveling - Fees	Have you suffered from Traveling - Getting Money for Fuel	Survey	Nominal	1=Yes; 2=No; 99=Missing
Issue_Wag e	Issues Regarding Wages - Min Wages	Have you suffered from Min wages no progression	Survey	Nominal	1=Yes; 2=No; 99=Missing

Sub_Anx	Sub-Score Anxiety	Score re: Anxiety	Analysis	Nominal	Compute average of questions relating to anxiety
Sub_Dep	Sub-Score Depression	Score re: Depression	Analysis	Nominal	Compute average of questions relating to despression
Sub_PWB	Sub-Score Positive Well-being	Score re: Positive Well-being	Analysis	Nominal	Compute average of questions relating to positive well-being
Sub_SC	Sub-Score Self-Control	Score re: Self Control	Analysis	Nominal	Compute average of questions relating self-control
Sub_Vit	Sub-Score Vitality	Score re: Vitality	Analysis	Nominal	Compute average of questions relating to vitality
Sub_GH	Sub-Score General Health	Score re: General Health	Analysis	Nominal	Compute average of questions relating to general health
MSS_Intr%	Minnesota Satisfaction: Intrinsic Satisfaction Percentage	Intrinsic Satisfaction Score	Analysis	Nominal	Compute Intrinsic Satisfaction Percentage
MSS_Extr%	Minnesota Satisfaction: Extrinsic Satisfaction Percentage	Extrinsic Satisfaction Score	Analysis	Nominal	Compute Extrinsic Satisfaction Percentage
MSS_GS%	Minnesota Satisfaction: General Satisfaction Percentage	General Satisfaction Score	Analysis	Nominal	Compute General Satisfaction Percentage
MSS_IntrCat	Minnesota Satisfaction: Intrinsic Satisfaction Category	Categorised Scores for Intrinsic Satisfaction	Analysis	Ordinal	1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5= Highly Satisfied
MSS_ExtrCat	Minnesota Satisfaction: Extrinsic Satisfaction Category	Categorised Scores for Extrinsic Satisfaction	Analysis	Ordinal	1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5= Highly Satisfied
MSS_GSCat	Minnesota Satisfaction: General Satisfaction Category	Categorised Scores for General Satisfaction	Analysis	Ordinal	1= Highly Unsatisfied; 2= Unsatisfied; 3= Can't Decide; 4= Satisfied; 5= Highly Satisfied

APPENDIX H

Full Descriptive Data

Trained Skill

Appendix I: Settings associated with Skills Trained/Learned		
	Yes **n (%)**	**No** **n (%)**	**p Value**
Setting	**Skill: Note Taking**	
Private ID Care		
Yes	71 (3.8)	45 (2.4)	0.01
No	847 (49.0)	883 (47.8)	
Nursing Home Private		
Yes	177 (9.6)	133 (7.2)	<0.01
No	741 (40.1)	795 (43.1)	
Private Home Care		
Yes	195 (10.6)	144 (7.8)	<0.01
No	723 (392.)	784 (42.5)	
Setting	**Skill: Observation**	
Area Hospice		
Yes	12 (0.7)	5 (0.3)	<0.01[1]
No	648 (35.1)	1181 (64.0)	
Public Hospital		
Yes	88 (4.8)	98 (5.3)	<0.001
No	572 (34.5)	1088 (58.9)	
ID Care Public		
Yes	39 (2.1)	42 (2.3)	0.02
No	621 (33.6)	1144 (62.0)	
Nursing Home Public		
Yes	103 (5.6)	94 (5.1)	<0.001
No	557 (30.2)	1092 (59.2)	
Home Care Private		
Yes	88 (4.8)	251 (13.6)	<0.001
No	572 (31.0)	935 (50.7)	
Home Care Public		
Yes	55 (3.0)	41 (2.2)	p<0.001
No	605 (32.8)	1145 (62.0)	
Mental Health Private		
	11 (0.6)	6 (0.3)	0.02
	649 (35.2)	1180 (63.9)	
Setting	**Skill: Fluid Balance Training**	
Nursing Home Public		
Yes	103 (5.6)	94 (5.1)	p<0.001
No	660 (35.8)	989 (53.6)	

Home Care Private			
Yes	96 (5.2)	243 (13.2)	p<0.001
No	667 (36.1)	840 (45.5)	
Home Care Public			
Yes	52 (2.8)	44 (2.4)	0.01
No	711 (38.5)	1039 (56.3)	
Mental Health Private			
Yes	12 (0.7)	5 (0.3)	0.02 [1]
No	751 (40.7)	1078 (58.4)	
Setting	**Skill: Medication Administration**		
ID Care Private			
Yes	74 (4.0)	42 (2.3)	p<0.001
No	289 (15.7)	1441 (78.1)	
ID Care Public			
Yes	42 (2.3)	39 (2.1)	p<0.001
No	321 (17.4)	1444 (78.2)	
Setting	**Skill: Palliative Care**		
Area Hospice			
Yes	13 (0.7)	4 (0.2)	0.01 [1]
No	756 (41.0)	1073 (58.1)	
Private Home Care			
Yes	123 (6.7)	216 (11.7)	0.03
No	646 (35.0)	861 (46.6)	
ID Care Public			
Yes	25 (1.4)	56 (3.0)	0.04
No	744 (40.3)	1021 (55.3)	
Setting	**Skill: Diabetes Care**		
ID Care Private			
Yes	41 (2.2)	75 (4.1)	<0.001
No	308 (16.7)	1422 (77.0)	
Mental Health Private			
Yes	7 (0.4)	10 (0.5)	0.03 [1]
No	342 (18.5)	1487 (80.6)	
Setting	**Skill: Epilepsy Care**		
Hospital Private			
Yes	8 (0.4)	111 (6.0)	<0.001
No	323 (17.5)	1404 (76.1)	
ID Care Private			
Yes	73 (4.0)	43 (2.3)	<0.001
No	258 (14.0)	1472 (79.7)	
ID Care Public			
Yes	50 (2.7)	31 (1.7)	<0.001
No	281 (15.2)	1484 (80.4)	

Setting	Skill: Pre & Post OP Training		
Area Hospice			
Yes	4 (0.2)	13 (0.7)	0.04
No	138 (7.5)	1691 (91.6)	
ID Care Private			
Yes	3 (0.2)	113 (6.1)	0.03[1]
No	139 (7.5)	1591 (86.2)	
Mental Health Private			
Yes	4 (0.2)	13 (0.7)	0.04[1]
No	138 (7.5)	1691 (91.6)	
Setting	**Skill: Intellectual Disability Training**		
Area Day Care Centre			
Yes	31 (1.7)	38 (2.1)	0.04
No	591 (32.0)	1186 (64.2)	
Area Hospice			
Yes	10 (0.5)	7 (0.4)	0.04[1]
No	612 (33.2)	1217 (65.9)	
Hospital Private			
Yes	21 (1.1)	98 (5.3)	<0.001
No	601 (32.6)	1126 (61.0)	
ID Care Private			
Yes	95 (5.1)	21 (1.1)	<0.001
No	527 (28.5)	1203 (65.2)	
ID Care Public			
Yes	72 (3.9)	9 (0.5)	<0.001
No	550 (29.8)	1215 (65.8)	
Mental Health Public			
Yes	17 (0.9)	15 (0.8)	0.02
No	605 (32.8)	1209 (65.5)	
Mental Health Private			
Yes	10 (0.5)	7 (0.4)	0.04
No	612 (33.2)	1217 (65.9)	
Setting	**Skill: Physical Disability Training**		
ID Care Private			
Yes	55 (3.0)	61 (3.3)	<0.001
No	409 (22.2)	1321 (71.6)	
ID Care Public			
Yes	36 (2.0)	45 (2.4)	<0.001
No	428 (23.2)	1337 (72.4)	
Home Care Public			
Yes	15 (0.8)	81 (4.4)	0.03
No	449 (24.3)	1301 (70.5)	

Mental Health Public			
Yes	14 (0.8)	18 (1.0)	0.01
No	450 (24.4)	1364 (73.9)	
Mental Health Private			
Yes	10 (0.5)	7 (0.4)	<0.01[1]
No	454 (24.6)	1375 (74.5)	
Setting	**Skills: Addiction Care**		
Area Addiction Services			
Yes	3 (0.2)	4 (0.2)	p<0.01[1]
No	110 (6.0)	1729 (93.7)	
Hospital Private			
Yes	1 (0.1)	118 (6.4)	<0.01[1]
No	112 (6.1)	1615 (87.5)	
ID Care Private			
Yes	15 (0.8)	101 (5.5)	<0.01
No	98 (5.3)	1632 (88.4)	
Mental Health Public			
Yes	7 (0.4)	25 (1.4)	<0.01
No	106 (5.7)	1708 (92.5)	
Setting	**Skill: Mental Health Care**		
Area Hospice			
Yes	8 (0.4)	9 (0.5)	0.04[1]
No	424 (23.0)	1405 (76.1)	
ID Care Private			
Yes	55 (3.0)	61 (3.3)	<0.001
No	377 (20.4)	1353 (73.3)	
ID Care Public			
Yes	34 (1.8)	47 (2.5)	<0.001
No	398 (21.6)	1367 (74.1)	
Nursing Home Public			
Yes	35 (1.9)	162 (8.8)	0.05
No	397 (21.5)	1252 (67.8)	
Home Care Public			
Yes	14 (0.8)	82 (4.4)	0.04
No	418 (22.6)	1332 (72.2)	
Mental Health Public			
Yes	26 (1.4)	6 (0.3)	<0.001[1]
No	406 (22.0)	1408 (76.3)	
Mental Health Private			
Yes	14 (0.8)	3 (0.2)	<0.001[1]
No	418 (22.6)	1411 (76.4)	

Setting	Skill: Life Skills		
Private Hospital			
Yes	29 (1.6)	90 (4.9)	0.04
No	576 (31.2)	1151 (62.4)	
ID Care Private			
Yes	58 (3.1)	58 (3.1)	<0.001[1]
No	547 (29.6)	1183 (64.1)	
ID Care Public			
Yes	40 (2.2)	41 (2.2)	<0.01
No	565 (30.6)	1200 (65.0)	
Mental Health Public			
Yes	16 (0.9)	16 (0.9)	0.04
No	589 (31.9)	1225 (66.4)	
Mental Health Private			
Yes	10 (0.5)	7 (0.4)	0.03[1]
No	595 (32.2)	1234 (66.8)	
Setting	**Skill: Driving**		
ID Care Private			
Yes	64 (3.5)	52 (2.8)	<0.001
No	482 (26.1)	1248 (67.6)	
ID Care Public			
Yes	44 (2.4)	37 (2.0)	<0.001
No	502 (27.2)	1263 (68.4)	
Home Care Private			
Yes	143 (7.7)	196 (10.6)	<0.001
No	403 (21.8)	1104 (59.8)	
Setting	**Skills: Other**		
ID Care Private			
Yes	31 (1.7)	85 (4.6)	<0.001
No	168 (9.1)	1562 (84.6)	
ID Care Public			
Yes	18 (1.0)	63 (3.4)	<0.01
No	181 (9.8)	1584 (85.8)	

[1]: Fisher's Exact Test

APPENDIX I
Full Descriptive Data
Skills in Practice

Appendix I.2 Table 1: Setting Type by Skills Practiced

	Yes n (%)	No n (%)	p Value*
Skill Practiced: Note Taking			
Hospital Private			
Yes	89 (4.8)	30 (1.6)	0.02
No	1111 (60.2)	616 (33.4)	
ID Care Private			
Yes	94 (5.1)	22 (1.2)	<0.001
No	1106 (59.9)	624 (33.8)	
ID Care Public			
Yes	64 (3.5)	17 (0.9)	<0.01
No	1136 (61.5)	629 (34.1)	
Nursing Home Practice			
Yes	227 (12.3)	83 (4.5)	<0.001
No	973 (52.7)	563 (30.5)	
Nursing Home Public			
Yes	109 (5.9)	88 (4.8)	<0.01
No	1091 (59.1)	558 (30.2)	
Home Care Private			
Yes	237 (12.8)	102 (5.5)	<0.04
No	963 (52.2)	544 (29.5)	
ID Care Public			
Yes	39 (2.1)	42 (2.3)	0.02
No	621 (33.6)	1144 (62.0)	
Nursing Home Public			
Yes	103 (5.6)	94 (5.1)	<0.001
No	557 (30.2)	1092 (59.2)	
Home Care Private			
Yes	88 (4.8)	251 (13.6)	<0.001
No	572 (31.0)	935 (50.7)	
Home Care Public			
Yes	48 (2.6)	48 (2.6)	<0.01
No	1152 (62.4)	598 (32.4)	

Skill Practiced: Observation			
Area Hospice			
Yes	10 (0.5)	7 (0.4)	<0.01
No	444 (24.1)	1385 (75.0)	
Hospital Private			
Yes	19 (1.0)	100 (5.4)	0.03
No	435 (23.6)	1292 (70.0)	
ID Care Private			
Yes	55 (3.0)	61 (3.3)	<0.001
No	399 (21.6)	1331 (72.1)	
ID Care Public			
Yes	42 (2.3)	39 (2.1)	<0.001
No	412 (22.3)	1353 (73.3)	
Nursing Home Private			
Yes	61 (3.3)	249 (13.5)	<0.03
No	393 (21.3)	1143 (61.9)	
Nursing Home Public			
Yes	75 (4.1)	122 (6.6)	<0.001
No	479 (20.5)	1270 (68.8)	
Home Care Private			
Yes	36 (2.0)	303 (16.4)	<0.001
No	418 (22.6)	1089 (59.0)	
Home Care Public			
Yes	37 (2.0)	59 (3.2)	<0.01
No	417 (22.6)	1333 (72.2)	
Mental Health Private			
Yes	9 (0.5)	8 (0.4)	<0.02
No	445 (24.1)	1384 (75.0)	
Skill Practiced: IV Care			
Hospital Private			
Yes	38 (2.1)	81 (4.4)	<0.001
No	205 (11.1)	1522 (82.4)	
Hospital Public			
Yes	61 (3.3)	125 (6.8)	<0.001
No	182 (9.9)	1478 (80.1)	
Nursing Home Private			
Yes	67 (3.6)	243 (13.2)	<0.001
No	176 (9.5)	1360 (73.7)	

Nursing Home Public			<0.001
Yes	44 (2.4)	153 (8.3)	
No	199 (10.8)	1450 (78.5)	
Home Care Public			
Yes	31 (1.7)	65 (3.5)	<0.001
No	212 (11.5)	1538 (83.3)	
Skill Practiced: IV Access			
Hospital Public			
Yes	8 (0.4)	178 (9.6)	<0.001[1]
No	11 (0.6)	1649 (89.3)	
Nursing Home Private			
Yes	8 (0.4)	302 (16.4)	<0.01[1]
No	11 (0.6)	1525 (82.6)	
Nursing Home Public			
Yes	5 (0.3)	192 (10.4)	
No	14 (0.8)	1635 (88.6)	0.04
Home Care Public			
Yes	4 (0.2)	92 (5.0)	0.02[1]
No	15 (0.8)	1735 (94.0)	
Skill Practiced: Fluid Balance			
Hospital Private			
Yes	104 (5.6)	15 (0.8)	<0.001
No	699 (37.9)	1028 (55.7)	
Hospital Public			
Yes	165 (8.9)	21 (1.1)	<0.001
No	638 (34.6)	1022 (55.4)	
Nursing Home Private			
Yes	239 (12.9)	71 (3.8)	<0.001
No	564 (30.6)	972 (52.7)	
Nursing Home Public			
Yes	151 (8.2)	46 (2.5)	<0.001
No	652 (35.3)	997 (54.0)	
Home Care Public			
Yes	83 (4.5)	13 (0.7)	<0.001
No	720 (39.0)	1030 (55.8)	

Skill Practiced: Medication Administration			
Hospital Private			
Yes	66 (3.6)	53 (2.9)	<0.001
No	301 (16.3)	1426 (77.2)	
Hospital Public			
Yes	98 (5.3)	88 (4.8)	<0.001
No	269 (14.6)	1391 (75.4)	
Nursing Home Private			
Yes	128 (6.9)	182 (9.9)	<0.001
No	239 (12.9)	1297 (70.3)	
Nursing Home Public			
Yes	78 (4.2)	119 (6.4)	<0.001
No	289 (15.7)	1360 (73.7)	
Home Care Private			
Yes	83 (4.5)	256 (13.9)	0.02
No	284 (15.4)	1223 (66.3)	
Home Care Public			
Yes	49 (2.7)	47 (2.5)	<0.001
No	318 (17.2)	1432 (77.6)	
Skill Practiced: Physical Exam & Critical Care			
Hospital Private			
Yes	67 (3.6)	52 (2.8)	<0.001
No	232 (12.6)	1495 (81.0)	
Hospital Public			
Yes	97 (5.3)	89 (4.8)	<0.001
No	202 (10.9)	1458 (79.0)	
Nursing Home Private			
Yes	121 (6.6)	189 (10.2)	<0.001
No	178 (9.6)	1358 (73.6)	
Nursing Home Public			
Yes	66 (3.6)	131 (7.1)	<0.001
No	233 (12.6)	1416 (76.7)	
Home Care Public			
Yes	46 (2.5)	50 (2.7)	<0.001
No	253 (13.7)	1497 (81.1)	

	Skill Practiced: Activities of Daily Living		
Hospital Private			
Yes	109 (5.9)	10 (0.5)	<0.001
No	1318 (71.4)	409 (22.2)	
Hospital Public			
Yes	163 (8.8)	23 (1.2)	<0.001
No	1264 (68.5)	396 (21.5)	
Nursing Home Private			
Yes	283 (15.3)	1144 (62.0)	<0.001
No	27 (1.5)	392 (21.2)	
Nursing Home Public			
Yes	181 (9.8)	16 (0.9)	<0.001
No	1246 (67.5)	403 (21.8)	
Home Care Public			
Yes	88 (4.8)	8 (0.4)	<0.001[1]
No	1339 (72.5)	411 (22.3)	
	Skill Practiced: Dementia Care		
Area Hospice			
Yes	13 (0.7)	4 (0.2)	<0.01[1]
No	740 (40.1)	1089 (59.0)	
Hospital Private			
Yes	62 (3.4)	57 (3.1)	<0.01
No	691 (37.4)	1036 (56.1)	
Hospital Public			
Yes	100 (5.4)	86 (4.7)	<0.001
No	653 (35.4)	1007 (54.6)	
ID Care Private			
Yes	35 (1.9)	81 (4.4)	<0.02
No	718 (38.9)	1012 (54.8)	
Nursing Home Private			
Yes	188 (10.2)	122 (6.6)	<0.001
No	565 (30.6)	971 (52.6)	
Nursing Home Public			
Yes	105 (5.7)	92 (5.0)	<0.001
No	648 (35.1)	1001 (54.2)	
Home Care Public			
Yes	54 (2.9)	42 (2.3)	<0.01
No	699 (37.9)	1051 (56.9)	

	Skill Practiced: Palliative Care		
Hospital Private			
Yes	55 (46.2)	64 (3.5)	<0.01
No	569 (30.8)	1158 (62.7)	
Hospital Public			
Yes	92 (5.0)	94 (5.1)	<0.001
No	532 (28.8)	1128 (61.1)	
Nursing Home Private			
Yes	157 (8.5)	153 (8.3)	<0.001
No	467 (25.3)	1069 (57.9)	
Nursing Home Public			
Yes	88 (4.8)	109 (5.9)	<0.001
No	536 (29.0)	1113 (60.3)	
Home care Public			
Yes	42 (2.3)	54 (2.9)	0.03
No	582 (31.5)	1168 (63.3)	
	Skill Practiced: Diabetes Care		
Hospital Private			
Yes	53 (2.9)	66 (3.6)	<0.001
No	318 (17.2)	1409 (76.3)	
Hospital Public			
Yes	64 (3.5)	122 (6.6)	<0.001
No	307 (16.6)	1353 (73.3)	
ID Care Private			
Yes	11 (0.6)	105 (5.7)	<0.01
No	360 (19.5)	1370 (74.2)	
Nursing Home Private			
Yes	101 (5.5)	209 (11.3)	<0.001
No	270 (14.6)	1266 (68.6)	
Nursing Home Public			
Yes	63 (3.4)	134 (7.3)	<0.001
No	308 (16.7)	1341 (72.6)	
Home Care Private			
Yes	31 (1.7)	65 (3.5)	<0.01
No	340 (18.4)	1410 (76.4)	

	Epilepsy Care		
Hospital Private			
Yes	45 (2.4)	74 (4.0)	<0.001
No	260 (14.1)	1467 (79.5)	
Hospital Public			
Yes	60 (3.3)	126 (6.8)	<0.001
No	245 (13.3)	1415 (76.7)	
ID Care Private			
Yes	11 (0.6)	105 (5.7)	0.04
No	294 (15.9)	1436 (77.8)	
Nursing Home Private			
Yes	90 (4.9)	220 (11.9)	<0.001
No	215 (11.6)	1321 (71.6)	
Nursing Home Public			
Yes	49 (2.7)	148 (8.0)	<0.001
No	256 (13.9)	1393 (75.5)	
Home Care Private			
Yes	72 (3.9)	267 (14.5)	0.01
No	233 (12.6)	1274 (69.0)	
Home Care Public			
Yes	28 (1.5)	68 (3.7)	<0.001
No	277 (15.0)	1473 (79.8)	
	Pre & Post Operative Care		
Hospital Private			
Yes	21 (1.1)	98 (5.3)	<0.01
No	154 (8.3)	1573 (85.2)	
Public Hospital			
Yes	40 (2.2)	146 (7.9)	<0.001
No	135 (7.3)	1525 (82.6)	
ID Care Private			
Yes	4 (0.2)	112 (6.1)	0.02
No	171 (9.3)	1559 (84.5)	
Nursing Home Public			
Yes	43 (2.3)	154 (8.3)	<0.001
No	132 (7.2)	1517 (82.2)	
Home Care Public			
Yes	28 (1.5)	68 (3.7)	<0.001
No	147 (8.0)	1603 (86.8)	

	Intellectual Disabilities Care		
Hospital Private			
Yes	54 (2.9)	65 (3.5)	<0.001
No	517 (28.0)	1210 (65.5)	
Hospital Public			
Yes	92 (5.0)	94 (5.1)	<0.001
No	479 (25.9)	1181 (64.0)	
ID Care Private			
Yes	24 (1.3)	92 (5.0)	0.01
No	547 (29.6)	1183 (64.1)	
Nursing Home Private			
Yes	128 (6.9)	182 (9.9)	<0.001
No	443 (24.0)	1093 (59.2)	
Nursing Home Public			
Yes	88 (4.8)	109 (5.9)	<0.001
No	483 (26.2)	1166 (63.2)	
Home Care Public			
Yes	46 (2.5)	50 (2.7)	<0.001
No	525 (28.4)	1225 (66.4)	
	Physical Disabilities Care		
Hospital Private			
Yes	51 (2.8)	68 (3.7)	<0.001
No	459 (24.9)	1268 (68.7)	
Hospital Public			
Yes	74 (4.0)	112 (6.1)	<0.001
No	436 (23.6)	1224 (66.3)	
ID Care Private			
Yes	19 (1.0)	97 (5.3)	<0.01
No	491 (26.6)	1239 (67.1)	
Nursing Home Private			
Yes	111 (6.0)	199 (10.8)	<0.001
No	399 (21.6)	1137 (61.6)	
Nursing Home Public			
Yes	77 (4.2)	120 (6.5)	<0.001
No	433 (23.5)	1216 (65.9)	
Home Care Public			
Yes	39 (2.1)	57 (3.1)	<0.01
No	471 (25.9)	1279 (69.3)	

	Addiction Care		
Hospital Private			
Yes	10 (0.5)	109 (5.9)	0.03
No	73 (4.0)	1654 (89.6)	
Hospital Public			
Yes	18 (1.0)	65 (3.5)	<0.001
No	168 (9.1)	1595 (86.4)	
Nursing Home Private			<0.01
Yes	24 (1.3)	59 (3.2)	
No	286 (15.5)	1477 (80.0)	
	Mental Health Care		
Hospital Private			
Yes	52 (2.8)	67 (3.6)	<0.001
No	399 (21.6)	1328 (71.9)	
Hospital Public			
Yes	81 (4.4)	105 (5.7)	<0.001
No	370 (20.0)	1290 (69.9)	
ID Care Private			
Yes	19 (1.0)	97 (5.3)	0.04
No	432 (23.4)	1298 (70.3)	
Nursing Home Private			<0.001
Yes	112 (6.1)	198 (10.7)	
No	339 (18.4)	1197 (64.8)	
Nursing Home Public			<0.001
Yes	73 (4.0)	124 (6.7)	
No	378 (20.5)	1271 (68.9)	
Home Care Public			
Yes	42 (2.3)	54 (2.9)	<0.001
No	409 (22.2)	1341 (72.6)	

Life Skills Practice			
Hospital Private			<0.001
Yes	57 (3.1)	62 (3.4)	
No	498 (27.0)	1229 (66.6)	
Hospital Public			<0.001
Yes	86 (4.7)	100 (5.4)	
No	469 (25.4)	1191 (64.5)	
Nursing Home Private			<0.001
Yes	135 (7.3)	420 (22.8)	
No	175 (9.5)	1116 (60.5)	
Nursing Home Public			<0.01
Yes	78 (4.2)	119 (6.4)	
No	477 (25.8)	1172 (63.5)	
Home Care Public			0.02
Yes	39 (2.1)	57 (3.1)	
No	516 (28.0)	1234 (66.8)	
Skill Practice Driving			
Area Day Care Centre			<0.01
Yes	12 (0.7)	57 (3.1)	
No	591 (32.0)	1186 (64.2)	
Hospital Private			0.04
Yes	49 (2.7)	70 (3.8)	
No	554 (30.0)	1173 (63.5)	
Hospital Public			<0.001
Yes	83 (4.5)	103 (5.6)	
No	520 (28.2)	1140 (61.8)	
Nursing Home Private			0.01
Yes	120 (6.5)	190 (10.3)	
No	483 (26.2)	1053 (57.0)	
Any Other Specialist Training			
Hospital Private			<0.001
Yes	21 (1.1)	98 (5.3)	
No	142 (7.7)	1585 (85.9)	
Hospital Public			<0.001
Yes	34 (1.8)	152 (8.2)	
No	129 (7.0)	1531 (82.9)	
Nursing Home Private			<0.001
Yes	52 (2.8)	258 (14.0)	
No	111 (6.0)	1425 (77.2)	
Home Care Public			<0.01
Yes	16 (0.9)	80 (4.3)	
No	147 (8.0)	1603 (86.8)	

APPENDIX J

Full Correlation Matrix

General Wellbeing Scale

General Wellbeing Scale Correlations Matrix of Entire Study Population

Spearman's Rho Variable	GWBS 1	GWBS 2	GWBS 3	GWBS 4	GWBS 5	GWBS 6	GWBS 7	GWBS 8	GWBS 9	GWBS 10	GWBS 11	GWBS 12	GWBS 13	GWBS 14	GWBS 15	GWBS 16	GWBS 17	GWBS 18
GWBS 1 Feeling in General	1																	
GWBS 2 Nervousness	.037	1																
GWBS 3 Firm Control of Behavior	.417**	.033	1															
GWBS 4 Sad, Discouraged or Hopeless	.486**	.024	.424**	1														
GWBS 5 Stress	.494**	.008	.388**	.571**	1													
GWBS 6 Happy/Satisfied	.416**	.004	.360**	.345**	.255**	1												
GWBS 7 Losing your Mind	.400**	.005	.481**	.515**	.434**	.387**	1											
GWBS 8 Anxiety	.512**	.009	.428**	.599**	.596**	.364**	.545**	1										
GWBS 9 Waking up Fresh/Rested	.511**	.006	.381**	.384**	.406**	.400**	.380**	.421**	1									
GWBS 10 Bothered by illness / pain	.368**	.017	.319**	.388**	.397**	.269**	.353**	.428**	.371**	1								
GWBS 11 Personal intrest in your life	-.430**	-.001	-.340**	-.316**	-.327**	-.454**	-.330**	-.347**	-.445**	-.240**	1							
GWBS 12 Downhearted / Blue	.540**	-.002	.446**	.584**	.509**	.425**	.512**	.631**	.474**	.450**	-.405**	1						
GWBS 13 Emotionally stable	-.325**	-.029	-.350**	-.349**	-.243**	-.321**	-.370**	-.336**	-.355**	-.196**	.348**	-.372**	1					
GWBS 14 Felt tired, Word out & Exhausted	.516**	.012	.378**	.488**	.578**	.334**	.415**	.526**	.577**	.447**	-.354**	.560**	-.293**	1				
GWBS 15 Concerned / Worried re: Health	.308**	.036	.261**	.297**	.284**	.275**	.317**	.332**	.336**	.397**	-.257**	.357**	-.209**	.389**	1			
GWBS 16 Relaxed or Tense	.487**	.070**	.371**	.415**	.449**	.373**	.382**	.480**	.476**	.389**	-.373**	.485**	-.313**	.513**	.534**	1		
GWBS 17 Energy and Vitality	.508**	.022	.382**	.411**	.456**	.381**	.390**	.450**	.603**	.418**	-.436**	.505**	-.336**	.604**	.454**	.643**	1	
GWBS 18 Depressed or Cheerful	.510**	.035	.449**	.485**	.434**	.413**	.485**	.526**	.469**	.384**	-.390**	.570**	-.372**	.477**	.479**	.605**	.578**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

APPENDIX K

Full Correlation Matrix

Minnesota Career Satisfaction

Survey

Minnesota Career Satisfaction Scale Correlations Matrix of Entire Study Population (n=1846)

Minnisota Satisfaction Scale Spearman Correlation	MSS 1	MSS 2	MSS 3	MSS 4	MSS 5	MSS 6	MSS 7	MSS 8	MSS 9	MSS 10	MSS 11	MSS 12	MSS 13	MSS 14	MSS 15	MSS 16	MSS 17	MSS 18	MSS 19	MSS 20	MSS 21	MSS 22	MSS 23	MSS 24	MSS 25	MSS 26	MSS 27	MSS 28
1. Keep Busy	1																											
2. Work alone	.379**	1																										
3. Different Things	.362**	.379**	1																									
4. Somebody in Community	.311**	.360**	.537**	1																								
5. Boss Handles Workers	.325**	.306**	.438**	.412**	1																							
6. Supervisor Competence	.301**	.316**	.397**	.382**	.756**	1																						
7. Not Against Conscience	.374**	.371**	.401**	.385**	.456**	.440**	1																					
8. Steady Employment	.320**	.201**	.242**	.205**	.329**	.312**	.303**	1																				
9. Helping others	.343**	.358**	.385**	.384**	.304**	.285**	.388**	.247**	1																			
10. Tell People What to do	.245**	.260**	.328**	.316**	.268**	.269**	.250**	.228**	.264**	1																		
11. Make use of Abilities	.379**	.357**	.529**	.530**	.425**	.419**	.406**	.272**	.517**	.383**	1																	
12. Company Policy to Practice	.330**	.319**	.407**	.367**	.613**	.606**	.435**	.376**	.339**	.319**	.447**	1																
13. Pay and Work I do	.223**	.201**	.297**	.260**	.391**	.360**	.318**	.328**	.186**	.212**	.286**	.406**	1															
14. Advancement in Job	.254**	.263**	.415**	.351**	.493**	.503**	.360**	.359**	.252**	.289**	.420**	.498**	.483**	1														
15. Freedom of own judgement	.297**	.364**	.451**	.434**	.490**	.502**	.448**	.278**	.394**	.331**	.524**	.486**	.352**	.484**	1													
16. Try own Methods	.287**	.341**	.455**	.421**	.427**	.439**	.402**	.246**	.345**	.348**	.502**	.457**	.290**	.433**	.700**	1												
17. Workiung conditions	.325**	.302**	.384**	.345**	.554**	.537**	.416**	.337**	.332**	.269**	.414**	.549**	.455**	.449**	.490**	.445**	1											
18. Get along with co-workers	.194**	.226**	.256**	.272**	.365**	.386**	.299**	.172**	.224**	.224**	.263**	.363**	.223**	.271**	.352**	.318**	.354**	1										
19. Praise	.286**	.298**	.439**	.415**	.577**	.539**	.380**	.278**	.320**	.282**	.417**	.501**	.425**	.479**	.502**	.468**	.518**	.368**	1									
20. Accomplishment	.309**	.278**	.346**	.384**	.359**	.351**	.347**	.156**	.424**	.216**	.442**	.340**	.218**	.325**	.417**	.378**	.380**	.317**	.439**	1								
21. Not Morally Wrong	.309**	.317**	.319**	.337**	.383**	.376**	.558**	.270**	.415**	.231**	.418**	.409**	.272**	.311**	.452**	.416**	.441**	.337**	.416**	.501**	1							
22. Policies & Prac. Employees	.340**	.316**	.382**	.374**	.616**	.599**	.455**	.382**	.321**	.295**	.416**	.691**	.414**	.481**	.487**	.444**	.575**	.368**	.564**	.371**	.465**	1						
23. Supervisor Understand Me	.333**	.285**	.342**	.367**	.638**	.696**	.432**	.339**	.320**	.270**	.390**	.537**	.339**	.438**	.481**	.432**	.509**	.364**	.544**	.382**	.405**	.566**	1					
24. Service to People	.371**	.356**	.368**	.401**	.345**	.322**	.404**	.205**	.584**	.271**	.491**	.348**	.239**	.296**	.436**	.388**	.370**	.279**	.395**	.508**	.490**	.377**	.405**	1				
25. Company Policy Administartion	.327**	.317**	.365**	.341**	.586**	.600**	.439**	.383**	.335**	.300**	.417**	.737**	.393**	.483**	.498**	.451**	.582**	.381**	.510**	.351**	.444**	.742**	.586**	.388**	1			
26. Boss backs up Employees	.293**	.302**	.397**	.375**	.739**	.675**	.403**	.306**	.302**	.284**	.408**	.581**	.377**	.486**	.503**	.452**	.539**	.377**	.601**	.388**	.406**	.620**	.639**	.380**	.629**	1		
27. Boss Complaint management	.272**	.277**	.374**	.363**	.736**	.667**	.395**	.325**	.292**	.276**	.388**	.596**	.383**	.488**	.483**	.427**	.538**	.388**	.582**	.359**	.384**	.620**	.635**	.361**	.621**	.805**	1	
28. How Steady my Job is.	.320**	.171**	.194**	.175**	.279**	.263**	.265**	.783**	.214**	.207**	.238**	.325**	.312**	.322**	.265**	.244**	.332**	.169**	.282**	.172**	.261**	.348**	.323**	.198**	.358**	.286**	.305**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

Notes:

CSTAR

CENTRE FOR SUPPORT AND TRAINING
IN ANALYSIS AND RESEARCH

HCA&CARERS
IRELAND

UCD
DUBLIN