DEVELOPMENT OF HEALTH SERVICES IN MALTA: PAST, PRESENT AND FUTURE

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ABSTRACT

As with other modern health systems, Malta has experienced significant changes in its health care landscape over the past two decades. Major changes have occurred, in the country itself and in its health care system, impacting both the provision and consumption of healthcare. The accession of Malta to the European Union has shaped Malta's health system by catalysing change, standardising certain processes and bringing new legislation. Investments in the infrastructure and health workforce together with innovative management policies and techniques have enhanced the delivery of healthcare to patients. The digitalisation of healthcare has also had a major boost in the past two decades, revolutionising healthcare provision while narrowing the gap between the patient and the healthcare provider. Various strategies and policies have been published and implemented to enhance the delivery of clinical services with the aim of reducing the disease burden of the Maltese population, from diseases such as cancer and diabetes. This article traces these main developments in a descriptive and analytical manner and provides a number of insights for the future.

Introduction

As with other modern health systems, Malta has experienced significant changes in its health care landscape over the past two decades. Malta's socio-economic development, EU membership in 2004 and the changing political, cultural and demographic conditions have left an indelible mark upon the provision of health care in Malta. This article traces the main developments and changes that have occurred in Malta since 1999, attempting to provide a critical appraisal apart from a descriptive account of this progress. This article only focuses on discussing health care services and excludes the wider public health dimension.

Methods

We reviewed the main policy and strategy documents and reports that have been developed in Malta between 1999 and 2018. These included national policy documents, health care service reports, medical briefs, clinical service plans, HR reports and other similar documents of relevance. The full list is provided in Appendix 1. A thematic approach was adopted, developing the main themes upon analysis. These focused upon resource developments (HR, finance, IT), infrastructure, advances in clinical services, national reforms and policies and new legislation. We reflect upon successes, areas in which less progress has been achieved and conclude by making some predictions on possible future developments.

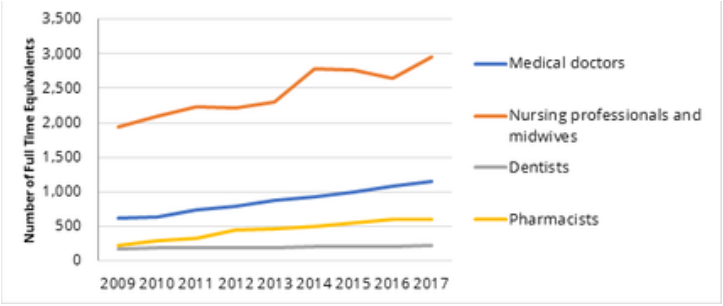
Resourcing in Health Services

Human Resource Development

The workforce continues to be the cornerstone of any health service and Malta is no exception. There have been remarkable developments in the configuration of the workforce both in numbers, complexity and diversity. The number of professionals working in the public health service has increased by 67%, from 2,966 to 4,942, between 2009 and 2017. The highest increase was registered in the number of pharmacists, which has more than doubled in this period, and in the number of doctors which increased by 88%. The number of allied health professionals, working with the public sector, increased by 26% between 2016 and 2018[1]. These changes were undoubtedly spurred by a combination of technological advancements, new service needs and the modernisation of the workforce through training, specialisation and the implementation of several significant collective agreements with unions.

The unions played an important role in moulding the way health care staff work today. Some would argue that whilst there have been many positive developments, the unions are perceived to have also hindered progress in changes to work practices and patient-centric care. Nonetheless, various initiatives have been undertaken to retain health care staff. Immediately following EU accession,

Malta experienced a worrying brain drain (2006-2009), especially in the medical workforce as several doctors were going abroad to train and work. On the 1st of June 2008, the Malta Post-Graduate Medical Training Centre was launched and it introduced the Foundation Programme and various Specialist Training Programmes for graduating medical doctors. This, together with radical changes in the working conditions of the medical class through a combination of improved conditions of work and planned career progression, has contributed to the retention and attraction of medical staff to Malta and the public health service, as can be seen in Graph 1 and Table 12.



Graph 1: Health workforce expressed as number of Full Time Equivalents working in Malta (both private and public sector) between 2009 and 2017, including doctors, dentists, nurses, midwives and pharmacists[1]

Year	Foundation Programme doctors	Specialist trainees
2012	157	269
2013	148	267
2014	190	291
2015	218	352
2016	220	380
2017	202	384
2018	237	387

Table 1: Number of doctors in training in Malta – Foundation doctors and specialist trainees (2012-2018) [2]

Collaborations have also been established with foreign institutions and hospitals to allow doctors to widen their exposure and get further training and experience from other centres. This has encouraged doctors to continue their training locally and to provide a high standard of service to our patients.

Other professions have also advanced, both in numbers and in scope. The number of registered allied health care professions has more than doubled in the past 15 years, with new professions such as medical physicists and genetic counsellors now forming part of the local health workforce. This has strengthened and consolidated their position, although they too have experienced difficulties in career progression. Conditions of work for nurses have also improved and various incentives have been in place to retain and attract local and foreign nurses. In 2018, around 415 interviews were conducted to attract local and foreign nurses to fill vacant posts[3].

Significant investment has also been placed in education and training of health professionals other than doctors. The transformation of the Institute of Health Care to the Faculty of Health Sciences is testimony to the increased importance placed upon the nursing and allied professions. A potential consequence is that educational standards may have suffered in the quest to increase numbers. Nurses and allied health professionals have also embarked on specialisation, although the route to creating specialists is likely to be different to that used by the medical profession.

A more recent phenomenon is the increasing multiculturalism of our workforce, especially in the nursing sector, where 8.5% of the total number of nurses working within the public sector are now foreign, with the greatest percentages being in Karen Grech Rehabilitation hospital (13.6%) and Mount Carmel Hospital (13.5%)[4]. This was brought about by the increasing demand on our health services and mirrors the radical demographic changes in Malta over the past few years. This presents significant challenges in terms of communication with patients, religious-cultural differences and integration into the workforce. Whilst much effort has gone into training and adapting foreign staff to the local workplace, systems need to be implemented to adequately manage this new challenge.

Financial investment in health services

Health services account for a large portion of public health finances. The main recurrent cost component is salaries (47%) given that health services are human resource intensive. Operational expenses, consumables, maintenance costs and upkeep of the building fabric account for another 11% of the recurrent budget. These exclude medicines which also constitute a major component of expenditure (around 20%)[5]. Substantial capital costs have been invested in health services most notably for the construction of Mater Dei Hospital and Sir Anthony Mamo Oncology Centre (SAMOC). The focus is now on primary care with the construction of primary care hubs, mental health and a new out-patients and mother and child complex.

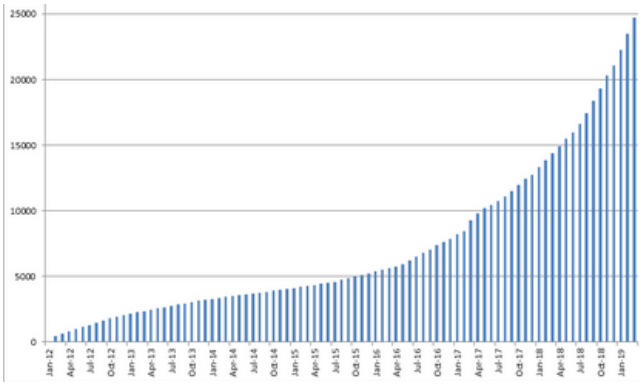
The budget for health services is based mainly on historical accounting, although itemised and activity-based costings are also calculated. Public health services have designed a pricing policy system that incorporates the BUPA coding system. However, this system has various limitations and past attempts to introduce more robust budgeting mechanisms such as Diagnosis Related Groups (DRGs) or similar systems have failed to date. Malta now officially reports in line with the System of Health Accounts and this is helpful in monitoring the various component of health financing in terms of comparative trends.

Digital Health

Various national ICT and e-health policies and plans have been drawn up over the last two decades. Consequently, several IT systems were introduced, at hospital and national level. These included a patient administration system (Patient Master Index, file tracking, admissions, discharges & transfers, outpatient appointments & registration, A&E encounters, bed management, resource management & scheduling), order communication system and corporate HR, finance and logistic IT systems.

The opening of Mater Dei Hospital, in 2007, served as an impetus to implement new technologies such as Radiology Information System, Picture Archiving & Communication System, Laboratory Information System, Pharmacy System, Operating Theatre System, Blood Bank IT system and a Cardiovascular database (CVIS). The electronic case summary and electronic medical record laid the groundwork for electronic communications beyond the hospital, to the family doctor and directly to patients through the introduction of e-health services.

MyHealth has increased, strengthened and facilitated the link between patients, health care providers and primary care. However, penetration, at least initially, was not high, as expected as seen in Graph 2, but this is steadily increasing [6].



Graph 2: Total number of people who have used myHealth at least once [6]

Most data is collected electronically through specific databases managed at hospital or ministry level. Although this should facilitate research and data collection and analysis, the use of IT in research studies and clinical studies is not as widespread as expected apart from complications which have recently arisen due to the often-erroneous interpretation and application of the new Data Protection Act.

Whilst all the above required a certain level of investment, a prolonged and sustained strategy for IT investment and development would highly benefit the healthcare sector and the country in general, as also highlighted in the National Digital Strategy 2014-20207. As part of the EU funded CONvErGE project, the introduction of electronic health records is envisaged[8].

Investment in healthcare infrastructure

The development of Mater Dei Hospital was the most material investment in the health sector (if not across all sectors) in recent decades in Malta. Its planning commenced in 1993, but it took over 14 years to open. It was the biggest and most important infrastructural project in Malta's history, but it was also very politically charged and had a convoluted history. All agreed that this investment was required and there is evidence that amenable mortality is improving[6], but how much of this is attributed to Mater Dei Hospital, is still questionable. Did Mater Dei Hospital bring about the expected quantum leap in changes in work practices and improvements in quality of care? Whilst there undoubtedly were improvements in the patient experience and certain clinical indices have improved, we may have yet to reap the full benefit of this investment. The other major sister project was the commissioning and construction of the new oncology centre, as part of a major drive to improve cancer services.

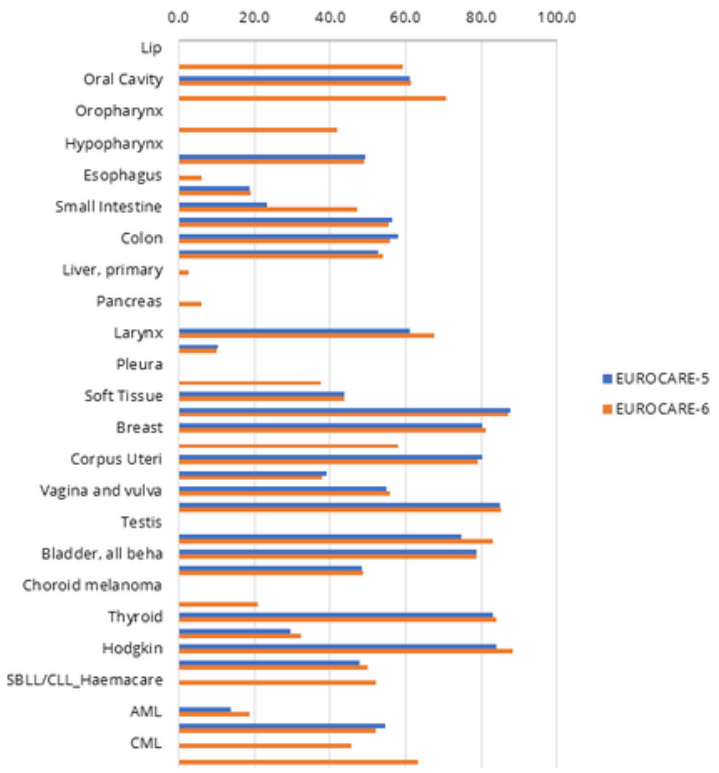
Government is currently implementing a Public Private Partnership. Originally this was intended to support investment in the infrastructure of rehabilitation services and as well as medical services in Gozo. However, after almost five years, the benefits of these concession projects are still unclear to many.

This policy was also adopted as part of its wider commissioning function, where innovative commissioning methods were employed both within Mater Dei Hospital and with the private sector to be able to tackle unmet needs and lower waiting lists. This has increased equity within the population by reducing waiting times to access certain surgical procedures, which was previously an access barrier to people who used only public health care.

Improvements in clinical services

As expected, several new and improved services were developed over the past 20 years. Most of these services were developed in response to national policy that often arose from clinical or societal needs identified at local or European level. One of the most notable services introduced was the national breast cancer screening programme which was launched towards the end of 2007[9].

Following this, colorectal cancer screening and more recently cervical screening were also introduced. To date uptake rates have not reached European norms and more effort is being put into educating and encouraging the public to attend screening. Also, although the 5-year relative survival rate for breast cancer has been increasing steadily since 1990, it continues to remain lower than the European average (based on 29 European countries grouped into five European regions)[10].



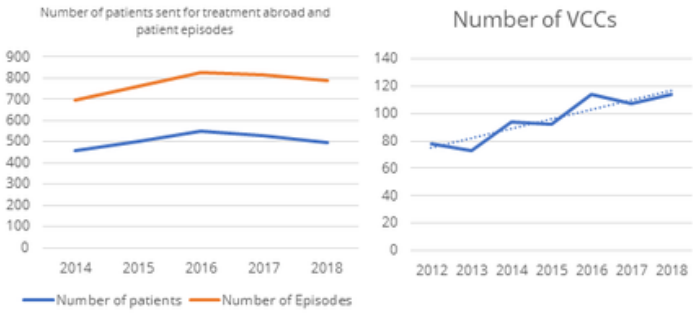
Graph 3: Comparison between EUROCARE-5 (followed up patients till 2010) and EUROCARE-6 (followed-up patients from 2011 onwards) survival estimates, for Maltese patients. Adult cases diagnosed in 2000-2007. Five-year Age Adjusted Relative Survival (AARS), Ederer II method(13).

This included investing in human resources, training, the advent of care protocols and guidelines and the construction of a new cancer centre. This Plan was followed by yet another National Cancer Plan, which was launched in 2017.

The second Plan continues to work on the success stories achieved by the first Plan while addressing new challenges. Although, the incidence of cancer, in Malta, has continued to increase, and is expected to continue increasing by 1.5-2% per year[12], we have also started seeing improvements in the survival rates of most cancers (Graph 3) thanks to various screening initiatives, the provision of a wider array of clinical services and treatments to cancer patients and the introduction and monitoring of clinical care pathways for common cancers[13].

Another new service that was rolled out after lengthy negotiations was the Pharmacy of Your Choice scheme (POYC). This was long overdue and despite the initial problems with shortage of medicines and bureaucratic paperwork and logistic problems, it is now deemed a success and is seen to benefit the public greatly. Electronic prescribing and dispensing is the next major deliverable that needs to be implemented.

Surprisingly, until 2014, Malta lacked a diabetes strategy, despite the high prevalence rates. The National Diabetes Plan was an attempt to redress this shortcoming. Various investments have been made to deal with the ever-increasing number of diabetic patients, while investing in health promotion and educational campaigns to prevent the major risk factors that increase the risk of diabetes. Investments have also been made in helping diabetic patients control their blood glucose levels.



Graph 4: (Left) Annual number of patients sent for treatment abroad (UK and outside the UK) since 2014 and the number of episodes (the number of times they were sent abroad) in comparison to the annual number of consultations performed by visiting consultants (VCCs) at Mater Dei Hospital since 2012 (right)15,16.

New medication was introduced in the Government Formulary List, the entitlement to blood glucose monitoring sticks and monitors was increased and all diabetic patients have become entitled to free dentures and spectacles, if needed[8].

Various collaborations have been established with foreign institutions and hospitals to establish a clear, safe and direct route to send our patients for treatment abroad or to get foreign experts to provide their service to our patients locally and share their expertise with our healthcare workforce.

On average, 507 patients are sent each year for treatment abroad. Figure 4 shows that while in past years the number of patients being sent abroad was increasing steadily, since 2016 this increase has been slowly reversed[15]. This was only possible thanks to the ever increasingly specialised local health workforce and to an increased number of Visiting Consultants[16].

These initiatives have allowed more patients to receive treatment locally and reduced the travelling burden on the patients and their relatives.

More recently, there have been ongoing efforts in preparation for Mater Dei Hospital to join European Reference Networks to further facilitate cross-border healthcare, specifically on rare and complex diseases.

Health service reforms and new legislation

A plethora of health service reforms and new legislation were introduced over the past two decades. Whilst it not the intention to enumerate them here, a few deserve special mention. Due to EU membership, most of Malta's public health legislation was revised or redrafted. However, due to the principle of subsidiarity on health matters, health service legislation was not directly affected by EU membership. One of the main changes in legislation was the Health Act[17], passed in 2014, determining the organisational and functional orientation of Malta's public health services. However, although this was an enabling act, subsequent legal changes were not followed up, such as detailed legislation on budgeting and pricing of clinical services. Other important legislation includes the Cross-Border Healthcare Regulations of 2013, the Human Organs, Tissues and Cell Donation Act of 2016 and the Healthy Lifestyle Promotion and Care of Non-Communicable Diseases Act of 2016, although the latter is not directly healthcare-related.

Emergency Preparedness

In 2014, the Maltese health care system showcased its emergency preparedness through its involvement in the Libyan Humanitarian Initiative. The Ministry for Health worked hand in hand with the Ministry for Foreign Affairs and the Malta Police Force to offer support to Libyan patients.

A health contingency plan for mass influx of injured migrants was created to ensure a fair triage system, safe transport of patients and their admission into various hospitals around Malta. A robust communication system was created to allow the smooth running of the said contingency plan and the tracking of these patients, for security reasons, while they were in Malta. Until the end of 2015, 165 injured Libyan patients had arrived in Malta and were given the necessary treatment. This was done without hindering in any way the smooth running of the day-to-day activities and provision of service to the local Maltese population[18].

Areas requiring further attention

Even though significant progress was registered on many fronts, some areas are still either underdeveloped or lacking the required political impetus. For example, whilst the introduction of no fault legislation has undergone consideration for many years, no steps towards its implementation have been taken.

This is deemed necessary to instil a culture of reporting incidents and near misses as part of a wider push to improve quality and standards of care. There are also some sectors of care that merit further attention, and which have been somewhat neglected for many years.

There have been several attempts at reforming primary care, none of which have succeeded. The current focus is not to implement a major reform but to develop services in the community through investment in primary care regional hubs and personnel. The new sectoral agreement for general practitioners has indeed succeeded in retaining and attracting new blood into the sector. Oddly enough, both the concept of regional hubs and the reorganisation of medical staff were two cornerstones of the last reform attempt in 2008.

Another sector in dire need of reform and change is mental health. Although much progress was achieved such as the new Mental Health Act and the institution of the Office of the Commissioner, reforms in clinical care and work practices are still required. 2019 should see the launch of Malta's first national mental health strategy, with resultant high expectations, the draft has been launched for consultation in December 2018[19]

Innovation is needed in the areas of health care financing and pricing policies, to come up with methods that will enable us to embark on and carefully monitor more commissioning projects, to ensure value for money and patient safety, while keeping the patient at the centre of our health care system6.

Conclusion

Over the past two decades, Malta has seen dramatic changes within its healthcare system. These changes have provided a more holistic and comprehensive service and a better standard of care to the Maltese population, while reducing inequalities and barriers to access to care.

This is reflected in the amenable mortality, which has decreased, in both sexes, between 2000 and 2014, by 3.8% per year[6]. Nonetheless, the ever growing and diversifying Maltese population and international pressures still pose many challenges to the Maltese healthcare system which will need to be tackled in the near future.

References

1. Eurostat – Your key to European Statistics [Internet]. 2018 [updated 2018; cited 2019 Mar 5]. Available from: https://ec.europa.eu/eurostat/data/database
2. Malta Postgraduate Medical Training Centre. Annual Reports 2012-2018. Malta: Ministry for Health; 2013-2019.
3. Directorate Nursing Services, Annual Report 2018. Malta: Ministry for Health; 2019.
4. Directorate Nursing Survives, HR ad hoc Data 2019: Ministry for Health.
5. Ministry for Finance. Ministry for Health. In: Ministry for Finance. Financial Estimates 2019. Malta: Government Print Press; 2018. p. 73-90.
6. myHealth statistics, Ministry for Health. Email from H. Agius Muscat dated 29 April 2019.
7. Digital Malta. National Digital Strategy 2014-2020. Malta: Parliamentary secretariat for competitiveness and economic growth; 2014. p. 80.
8. Malta Information Technology Agency. CONvErGE: €40 million investment to strengthen Government's ICT systems [Internet]. Malta: Government of Malta; 2017 [updated 2017 May; cited 2019 Apr 2]. Available from: https://www.mita.gov.mt/en/News/Pages/2017/CONvErGE-%E2%82%AC40-million-investment-to-strenghten-Government%E2%80%99s-ICT-systems.aspx
9. Ministry for Health, Breast Screening Programme [Internet]. (cited 2019 Mar 7). Available from: https://deputyprimeminister.gov.mt/en/phc/nbs/Pages/Breast-Screening-Programme.aspx
10. Attard J, Dalmas M, England K. An Update in Breast Cancer Epidemiology and Healthcare Services in Malta. The Synapse. 2016; Vol 15 (issue 2):31-33.
11. Strategy and Sustainability Division - Ministry for Health, the Elderly and Community Care; National Cancer Plan 2011-2015. Malta: 2011. 63 p.
12. Ministry for Health. National Cancer Pan 2017-2021. Malta: 2017. 107 p.
13. EUROCARE Scientific Direction. EUROCARE – Survival of cancer patients in Europe [Internet]. Italy: Istituto Superiore di Sanità - Settore I - Informatica; 2019 [updated 2019; cited 2019 Mar 15]. Available from: http://www.eurocare.it/Eurocare6/tabid/92/Default.aspx
14. Ministry for Health. Diabetes: A National Public Health Priority, A national strategy for diabetes 2016-2020. Malta: Ministry for Health; 2015. 90 p.
15. Treatment Abroad Unit. Annual Reports 2014-2018. Malta: Ministry for Health; 2015-2019.
16. Treatment Abroad Unit. Annual Reports 2012-2018. Malta: Ministry for Health; 2013-2019.
17. Government of Malta, Health Act – Arrangement of Act. Cap. 528. Malta: 25th October 2013. p.12
18. Office of the Chief Medical Officer. Annual Reports 2014 and 2015. Malta: Ministry for Health; 2015-2016.
19. Office of the Deputy Prime Minister. A Mental Health Strategy for Malta 2020-2030 – Public Consultation Document. Malta: Ministry for health; December 2018 50 p.