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The Use of ISBARED/ISHAPED and Elimination of Reviewing Patients' Chart before Handoff to Decrease Incremental Overtime

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Section I. Abstract

Problem: Incremental overtime was found to majorly impact the financial well-being of a stroke unit. From an allocated budget of 22 hours per pay period, the unit's incremental overtime averaged 40 hours. The stroke unit had skilled-mix competencies, further complicating handoffs. The absence of a standard reporting method means that reviewing patients' charts takes approximately 10 to 15 minutes, extending what should be a quick, but thorough nurse knowledge exchange.

Context: The body of evidence reviewed indicated that pertinent information to patient care is not left out or missed when a standardized tool is used during handoff. Based on Lean methodology principles, focus was given to wasteful processes and the use of the evidence-based handoff tool ISBARED/ISHAPED, an SBAR derivative. The unit budget contributes to the overall healthcare spending of an organization. This is where services are rendered and metrics that matter are focused on the patients. It is also where finances matter in terms of waste and savings. As such, processes that are wasteful or redundant need to be reviewed and eliminated so that flow is smooth and care costs are minimized at all times. IOT takes a large bite from the unit budget due to suboptimal management of resources (time, money, or processes).

Intervention: This project did small tests of change indicating how this evidence-based tool could facilitate better flow at shift change and eliminate the 5-minute review of patients' charts. ISBARED/ISHAPED has the potential to facilitate better flow at shift change; however, work ethics was acknowledged in this process. Small modifications exposed the intricacies of working in a unionized skilled-mix unit, the work culture, and the readiness for change. This project also intensified the Gemba walk of nurse leaders allowing nurses to concentrate on performance expectations, roles, and accountability in financial stewardship.

Measures: As an outcome measure, IOT per PP was monitored and represented as a graph. The process measures of IOT and NKE were the drivers for the project and were reviewed based on the number of nurses complying with the mandate through nurse leaders Gemba Walk. Chart reviews before handoff, NKE and IOT processes became an integral part of it. Huddle time between two shifts was also monitored to see how it affects IOT. The balancing measure is aimed at evaluating nurses' engagement, participation, and readiness for the change.

Results: Generally, there was a decrease in IOT. The ISBARED/ISHAPED tool did not significantly make an impact to decrease IOT because only a few nurses were chosen to use it. However, based on their comments a greater impact would have been felt if all used it and prepared one for incoming shifts. This process would have eliminated the 5-minute review of patients' charts and easily facilitate handoff, but the 5-minute review of charts was kept due to union agreements. The tool, however, demonstrated how this evidence-based tool can improve flow at the change of shift and provide a comprehensive communication tool for the NKE. On the other hand, the Gemba walk that tackled huddle time, coaching and supporting individual nurses, NKE and IOT processes made a great impact on processes, awareness, roles, accountability and collaboration to decrease IOT.

Conclusion: The ISBARED/ISHAPED handoff tool is an effective means to address the flow of information during nurse knowledge exchanges at the bedside, as it is an evidence-based, standardized form. However, its success requires purposeful use that can prove difficult when doing so challenges existing work processes and/or work culture.

Keywords: incremental overtime, handoff, nurse knowledge exchange, lean, Gemba, ISBARED, ISHAPED, productivity report, work culture

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Section II. Introduction

Healthcare is the product of a complex system of people, patients, professionals, patterns, and processes working together to influence health outcomes. A systems approach relies on evidence-based principles to standardize processes, embed best practices, and drive continuous improvement by identifying and eliminating waste (Kaplan, 2017). The demand for high-quality care has become more focused with the shift from pay per service to reimbursement.

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score has been an important metric that hospitals are continuously improving. It provides meaningful and transparent assessments of care and was designed to produce data on patients' perspectives of care (Centers for Medicare and Medicaid Services [CMS], 2021). Out of the 29 questions asked, 16 were influenced by nursing care. Hence, the survey result became a benchmark for most hospitals when implementing strategies to HCAHPS. Furthermore, hospitals are increasingly being held accountable for performance on HCAHPS and scores are included in the calculation of the Centers for Medicare & Medicaid Services (CMS) Value-Based Payment Modifiers (Martsolf et al., 2016).

Nurses take care of patients more than any other medical professionals, sometimes 24 hours a day. This means they are commonly the hub within a complex healthcare system and, with this paradigm shift, have been catapulted into an era where strategies are constantly changing to improve their performance, outcomes, satisfaction, and cost-effectiveness. Not surprisingly, this has significantly increased the demands and pressure on nurses. They can be compelled to work beyond their shifts for both avoidable and unavoidable reasons, necessarily

increasing a unit's operating expenses. Increasingly unwieldy labor costs have left hospitals vulnerable as policymakers push for broader adoption of Medicare rates and as private health plans continue to cut provider prices, forcing hospitals to operate with less revenue (Chernew, 2019, as quoted in Daly, 2019).

Among the 586,500 hospital jobs created since 2009, labor's share of total expenses increased steadily from 2008 to 2018, from 50.6% to 54.9% (Daly, 2019). Due to potential impacts to nursing, patient outcomes, care experience, and finance, healthcare organizations have sought to decrease incremental overtime, and overtime in general, without compromising patient care. Further, healthcare leaders have focused on labor-saving strategies to stabilize healthcare costs and ensure financial solvency.

Problem Description

It is standard practice that nurse knowledge exchange (NKE) happens at the start of every shift. Shift handoff communication at the bedside reflects the principles of patient-centered care and benefits all stakeholders via financial savings, accountability, mentoring opportunities, patient safety, and patient satisfaction (Lin et al., 2015). NKE lasts approximately 3 to 5 minutes per patient and includes patient feedback when possible to clarify issues, answer questions, and agree on the plan of care. The NKE for the shift or the day allows patients to learn about their unique healthcare journey and frequently emphasizes the most pertinent issue(s) that persisted on the outgoing shift (e.g., pain, mobility, or outstanding complaint).

Five out of 41 studies indicated that nurse bedside reports decreased overtime hours or related costs by 10 minutes per day, resulting in decreased annual salary expenses ranging from $95,680 for overtime paid at the regular hourly rate to $143,520 for overtime paid at the time-and-a-half rate (Cairns et al., 2013 & Mardis et al., 2016, as cited in Dorvil, 2018).

The stroke unit in this medical facility has five mixed patient groups. Nurses take care of stroke, neuro stepdown (NSD), epilepsy monitoring (EMU), telemetry, and medical-surgical patients. There is a skill-mixed competency level and nurses must be stroke, NSD, and EMU certified. The expected practice means that after the 5-minute huddle, nurses receive the bedside handoff report immediately. However, off-going nurses wait for incoming nurses as they take time to look at patients' charts before they start receiving handoff reports. This activity generally takes about 10 to 15 minutes because neurology patients tend to have complicated needs and some nurses fail to give thorough patient reports. This has been a traditional nursing practice that may not be financially sustainable, as time is used to review patient data that could be accomplished through handoff reports.

Based on the Lean methodology, a wasteful practice such as this should be limited, if not eliminated all together, as it hinders work flow and increases incremental overtime. For pay period (PP) 6 in 2021, the productivity report revealed 49.37 hours of overtime, compared to the target of 22 hours. In this project, incremental or incidental overtime (IOT) was defined as early clock-in/late clock-out, inability to complete required tasks by the end of the shift, or shift transition conflicts (handoff late or last-minute attending to patients' needs).

A hand-off is a real-time transfer and acceptance of patient information and care responsibility from one caregiver to another, or from one team of caregivers to another, to ensure the continuity and safety of patient care (The Joint Commission [TJC], 2017). The absence of a standardized tool may prevent effective communication between shifts, increasing the chance of missing essential information and causing incoming shifts to review patients' charts before getting reports.

Available Knowledge

The PICOT question used in the literature search and evidence appraisal to decrease incremental overtime was: In neurological patients (P), how do the use of ISBARED/ISHAPED and elimination of reviewing patients' charts before handoff (I) compared to no intervention (C) decrease incremental overtime (O) in two months (T)?

The comprehensive literature search involved the following databases: Cochrane, CINAHL, PubMed, and AHRQ Evidence Reports. Keywords used were *overtime, nursing, staffing,* AND *incremental*. Searches were filtered according to publication date within 5 years, ages 19 years old and older, use of English language, full text, system analysis, randomized controlled trials, and meta-analysis. When these limitations were used, CINAHL netted 144 articles and PubMed netted 13 results, while Cochrane and AHRQ did not provide meaningful articles. The school librarian was approached, as only a few articles targeted the theme of the PICOT question. Five articles were used and appraised using Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal tool (Dang & Dearholt, 2018) (see Appendix A for the Evaluation Table).

A qualitative study design using semi-structured interviews and thematic analysis from 23 healthcare leaders from 16 hospital sites in Ontario, Canada showed two main themes: (a) enacting proactive human resource practices and (b) having strong, caring, and strategic leaders who foster learning and supportive work environments (Jeffs et al., 2015). Insights gained from this study may offer strategies to maximize the nursing workforce, minimize overtime, absenteeism, and agency use to ensure safe, efficient, and quality healthcare. The study was rated VB.

A multicentered longitudinal study of 638 individual patient observations from September 1, 2016 to January 30, 2017 showed that bedside handover takes 146 seconds for one patient (83 s – 204 s), depending on the previously used handover model, the number of patients allocated to each nurse, and the use of a structured handover (Malfait et al., 2018). The study was rated IIIB and indicated that structured or uniform handover content can hasten bedside reports.

A quasi-experimental study of 564 handoffs with the participation of 24 nurses in two coronary care units in 2017 showed a significant increase in the frequency of providing information ($P < 0.001$) on patient identity, current situation, clinical history, system status review, and recommendations (Pakcheshm et al., 2020). The study was rated IIB.

A modified, multi-round, web-based, Delphi data collection survey of an anonymized panel sample of 264 nurse experts working at a multisite public hospital in Switzerland showed a consensus for an evidence-based nursing handover standard for inpatients for use at shift changes or internal transfers (Tacchini-Jacquier et al., 2020). A standardized, hospital-wide, shift-to-shift nursing handover process encourages nursing care teams to conscientiously share information essential to the continuity of care. The study was rated VB.

Watanabe and Yamauchi (2019) did a cross-sectional design of 1,075 full-time nurses working in four hospitals in Japan from October 2015 – February 2016. It revealed five types of overtime workers who differed greatly in levels of fatigue, mental status, and work engagement. The study was rated as IIIB.

The body of evidence mentioned above indicated that pertinent information to patient care is not omitted or missed when a standardized tool is used during handoff. Moreover, the insights provided offer healthcare leaders strategies to maximize the nursing workforce and minimize overtime, absenteeism, and agency use to ensure safe, efficient, and quality healthcare.

Rationale

Lean methodology defined as patient-centered approach to managing and delivering care that continuously improve how work is done (Black & Miller, 2008, as cited in Rotter et al., 2019) formed the theoretical framework of this review. Black and Miller (2008, as cited in Rotter et al., 2019) also defined Lean methodology as a patient-centered approach to care that strives to continuously eliminate waste and increase the percentage of value-added work without increasing costs, staff, space, or inventory. The Lean methodology has two guiding tenets: (a) continuous improvement and (b) respect for people (Planview, 2021). This project aims to decrease IOT by finding and reducing waste through changed practices and culture.

The core idea of Lean methodology is to maximize customer value while minimizing waste, thus creating more resilient and proficient organizations (Lean Enterprise Institute, 2021). However, changing practices and cultures takes time, meaning that results are rarely immediate. If eliminating a process (reviewing patients' charts before handoff) decreases IOT (by using a standardized tool), even by a small fraction, then the course of continuous improvement is constant.

Specific Project Aim

The specific aim of this project was to decrease IOT from 49.37 hours to 22 hours per PP by the end of July 2021 with the use of a standardized handoff tool, the elimination of patient chart reviewing before receiving handoff reports and strengthening the Gemba Walk.

Section III. Methods

Context

The systems approach in a microsystem is a dynamic interaction that improves patient safety and quality of care by adjusting design, processes, or policies. A systems approach relies on evidence-based principles to reduce variability, embed best practices, and drive continuous improvement by identifying and eliminating waste (Kaplan, 2017). A systems approach essentially helps save healthcare dollars by eliminating waste and maximizing quality care.

The medical center's 4th floor is comprised of two units. The east side (4E) holds the medical unit that handles spine surgeries and chemotherapy. The west side (4W) holds the telemetry stroke unit that handles stroke, step-down, epilepsy, and brain surgeries secondary to trauma or neurological emergencies (see Appendix B).

Nurses who work on the stroke unit have stroke, epilepsy, telemetry, and neurological stepdown certification and training to care for a mixed patient population. Most of these nurses hold bachelor's degrees and some hold associates in nursing. On average, nurses have worked on the floor for 5 to 10 years, with some staff giving 20+ years of excellent care.

The facility has been awarded the American Heart Association/American Stroke Association's Get With The Guidelines-Stroke Gold Plus Quality Achievement Award for implementing excellent care for stroke patients for 8 consecutive years. It also earned the prestigious Comprehensive Stroke Center designation by The Joint Commission.

Its team approach to caring for patients with diseases and injuries to the brain, spine, and peripheral nerves has allowed patients the advantage of being cared for by a multidisciplinary team—from sanitation engineers to specialized physicians and nurses. The admission process is typical of any unit; however, patterns and processes have been disrupted because of numerous

metrics. Examples are education on falls, incentive spirometer, ambulation, central lines, catheters, hospital-acquired pressure injury prevention, and medication side effects. Patterns can also be disrupted with floats and travelers who are unfamiliar with the workflow and methods of the unit.

Metrics that matter includes prevention of hospital-acquired pressure injuries (HAPIs), falls, hospital-acquired pneumonia, catheter-associated urinary tract infections (CAUTIs), and central line-associated bloodstream infections. Stroke protocol tackles early ambulation and venous thromboembolism prophylaxis. Patient experience is another major metric being monitored and improved continually.

The unit budget contributes to the overall healthcare spending of an organization. This is where services are rendered and metrics that matter are focused on the patients. It is also where finances matter in terms of waste and savings. As such, processes that are wasteful or redundant need to be reviewed and eliminated so that flow is smooth and care costs are minimized at all times. IOT takes a large bite from the unit budget due to suboptimal management of resources (time, money, or processes).

The unit's budget allows for only 22 hours per PP of IOT; however, PP 6 of 2021 showed an IOT of 49.37 hours. This number represents more than double what is budgeted for that metric; hence, the reason for this project.

When asked about ongoing IOT, staff give several reasons, handoff of stroke scales being the most common. A SWOT analysis (see Appendix C) assessed the unit and determined strategic planning of the problem of IOT. The unit is a skill mixed unit comprised of nurses with an average of 5 years of experience. However, turnover makes for a vulnerable core staff, depending on the shift and number of certified nurses to handle stroke, stepdown, and epilepsy

monitored patients. This challenges the certification of new nurses to the unit's competency. Unit certification of new nurses lags 2 to 4 months behind other units. As such, metrics that matter, such as finance, are affected. A survey (see Appendix D) obtained staff perspective regarding IOT. Results were shown in a Fishbone diagram (see Appendix E).

Intervention

Interventions to decrease IOT will be implemented using the Project Process Map (see Appendix F). Interventions will focus on doing final rounding visits of outgoing staff an hour before the change of shift tackling the 5 Ps (pain, potty, position, periphery, and possession) and explaining to patients that a change of shift will happen in an hour. The goal is to minimize call lights and interruptions at end of shifts by preparing and educating patients for the unit's upcoming activity.

Incoming nurses immediately get handoff or NKE at the bedside after the huddle and do not review patients' charts. The specific intervention is the Bedside Report Tool (see Appendix G) for comprehensive reporting of pertinent information, making the handoff systematic and organized.

Nurse leaders from outgoing and incoming shifts do their Gemba walk to ensure that staff do their NKE at the bedside and no staff are still reviewing patients' charts after the huddle. This is particularly important to flow and providing immediate feedback to nurses who do not comply. The huddle will include this message under care experience. The nurse leaders' Gemba walk will also include meeting nurses in the office who persist in accruing overtime to overcome IOT with the nurses' choice of union representation.

The Gemba walk is an essential part of the Lean management philosophy that allows managers and leaders to observe actual work process, engage with employees, gain knowledge

about the work process, and explore opportunities for continuous improvement (Kanbanize, 2021).

Study of Intervention

The study of the intervention for the project will be done daily at every change of shift. Additionally, changes in IOT per PP will be monitored. Staff compliance is considered a success of this project when staff no longer review patients' charts for 15 minutes and, instead, get the report immediately following the huddle. Another study of intervention is getting input from staff and giving feedback on how to best utilize the tool in a skilled-mixed unit.

This project was intended to improve quality by implementing different PDSAs. The change of process will be a big change in practice, especially for those nurses who have been in the unit for 10+ years. The PDSA cycles for this project focus on eliminating the review of assigned patients' charts, using a standardized tool in the handoff report, on-time unit huddles, and continuous Gemba walks of nurse leaders to ensure compliance to decreasing IOT.

Measures

The goal of this project was to decrease IOT by eliminating the wasteful process practice of chart reviews before handoff and using a standardized reporting tool. As an outcome measure, IOT per PP will be monitored and represented as a graph. The process measures are the drivers for the project and will be reviewed based on the number of nurses complying with the mandate and how many use the standardized tool. The balancing measure was aimed at evaluating nurses' engagement, participation, and readiness for the change. The project will be fully implemented by August 2021. Specific measures for this project can be found in the Project Charter (see Appendix H).

Ethical Considerations

Stewardship and nonmaleficence are the ethical basis for this project. In a sentinel alert publication by TJC (2017), the potential for patient harm—from the minor to the severe—is introduced when the information given is inaccurate, incomplete, untimely, misinterpreted, or otherwise unneeded. SBAR (and its derivatives) calls for all relevant information to be organized in a logical fashion before the communication process as a technique to increase patient safety and inform “best practices” in critical situations (Müller et al., 2018).

Caldwell and Karri (2005), as cited by Okpala and Caldwell (2019) stated that ethical stewardship fundamentally optimizes long-term economic wealth in the best interests of the principals and all of the other stakeholders collectively, while maximizing social welfare and the long-term economic and social benefits owed to society. In this regard, optimizing resources and care will make care affordable and available to more people. The simple aim of operating the unit within budget is to make healthcare more affordable to its members. This project was evaluated by USF faculty and deemed a quality improvement project, therefore it does not need IRB approval (see Appendix I).

Section IV. Outcome Measure Results

Productivity Report

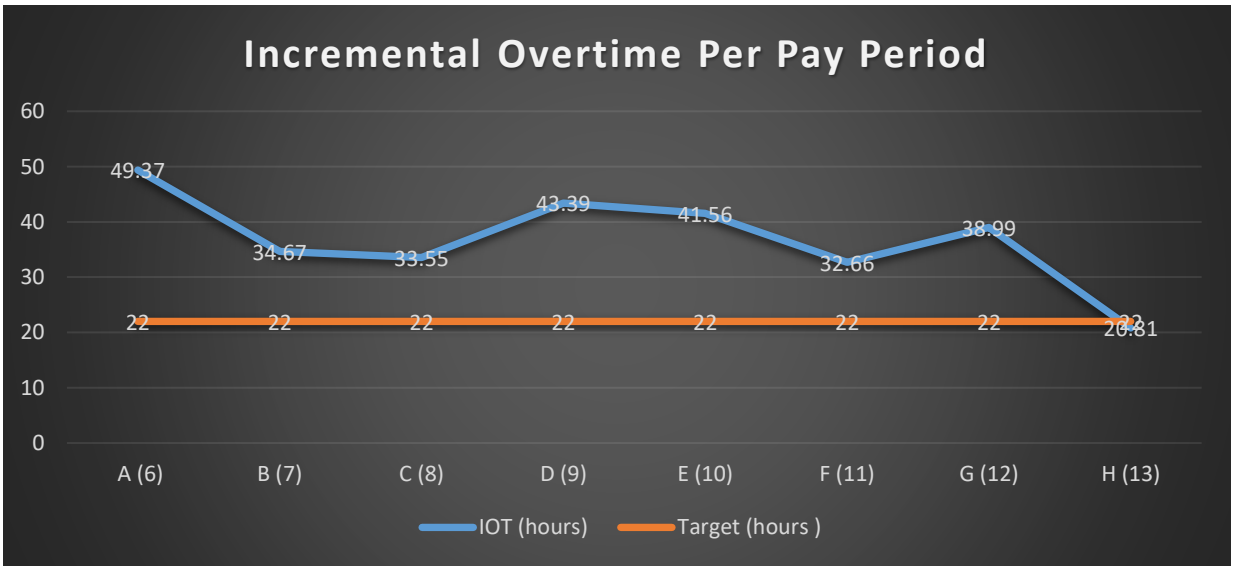
A patient care services bedded units productivity report was extracted from Prism and run from PP6 to PP13 (see Figure 1). Prism is a software program that tracks workflow, like IOT. PP is a 2-week cycle of work. The graph shows the simplicity of the results of IOT in hours versus the target goal of 22 hours per PP; however, many factors affect the totality of the productivity index (see Table 1). Factors like missed meals and breaks time paid and IOT can be controlled or modified through efficient improvement processes. Factors that drive incremental overtime are measured by these processes.

Productivity Trend by Pay Period

Figure 1 below shows a decreasing trend between PP6 to PP8. However, from PP8 to PP9, it jumped to a 10-hour increase in IOT. It went to a downward trend again from PP9 to PP11. PP13 was the lowest so far in IOT, as it was below target hours.

Figure 1

Incremental Overtime Versus Target Hours Per Pay Period



Productivity Report

The productivity report below shows various factors monitored that affect the productivity index. Hospital productivity (index) is measured as the ratio of outputs to inputs; whereas outputs capture quantity and quality of care for hospital patients; inputs include staff, equipment, and capital resources applied to patient care (Castelli et al., 2015).

Table 1

Productivity Trend From PP6 to PP13

Med/Tele Unit	PP6	PP7	PP8	PP9	PP10	PP11	PP12	PP13
Total UOS	243	234	240	243	238	250	239	152
Total UOS	251	238	238	238	242	241	234	234
Productivity index	97%	100%	93%	97%	95%	106%	93%	89%
Productive	3,172	2,985	3,284	3,188	3,185	3,003	3,273	2,170
Non-productive	633	725	670	614	678	728	1051	470
All sitter	30	10	138	116	135	107	152	46
Variance to target productive hours	-83	-10	-234	-96	-153	169	-235	-238
Productive hours per UOS	13	13	14	13	13	12	14	14
Overtime % of productive	4%	2%	4%	4%	5%	5%	13%	5%
Variance to budget OT % - of productivity	1%	2%	2%	2%	0%	0%	-1%	-1%
Missed meal time paid	2	7	7	4	37	17	6	1
Missed meals & breaks paid	$0	$0	$0	$0	$0	$0	$0	$0
Variance to budget paid FTE	-0.2	-1.6	-5.1	-2.6	-2.8	-0.7	-3.9	11.9
Incremental overtime	49.37	34.67	33.5	43.39	41.56	32.66	38.99	20.81

Huddle Time

Huddle starts at every shift at 15 minutes to the hour. However, based on the Fishbone diagram (see Appendix E), long huddles were a potential cause of IOT. Huddle time was monitored at shift changes between afternoon and night (see Figure 2) and night and day shifts (see Figure 3) as part of the effort to curtail IOT. The figures show the huddle times on the shifts mentioned. Time spent in huddles between night and day shifts averaged 5.27 minutes, while afternoon and night shift huddles averaged 4.72 minutes.

Figure 2

Monitoring Huddle Time between Afternoon and Night Shifts

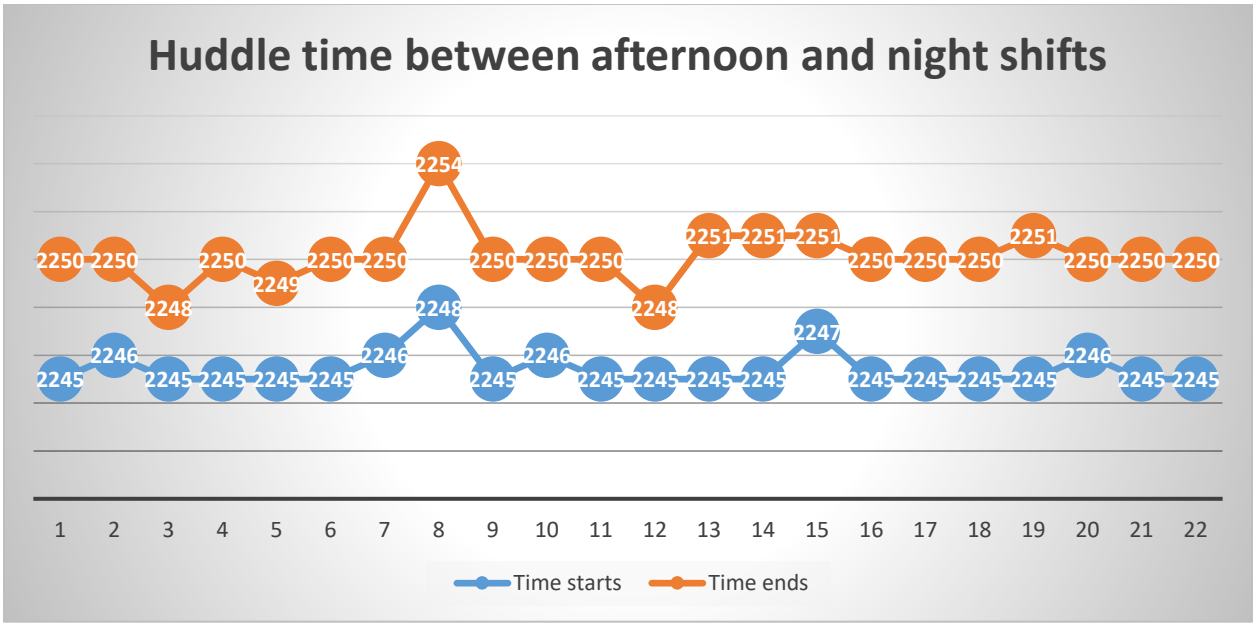
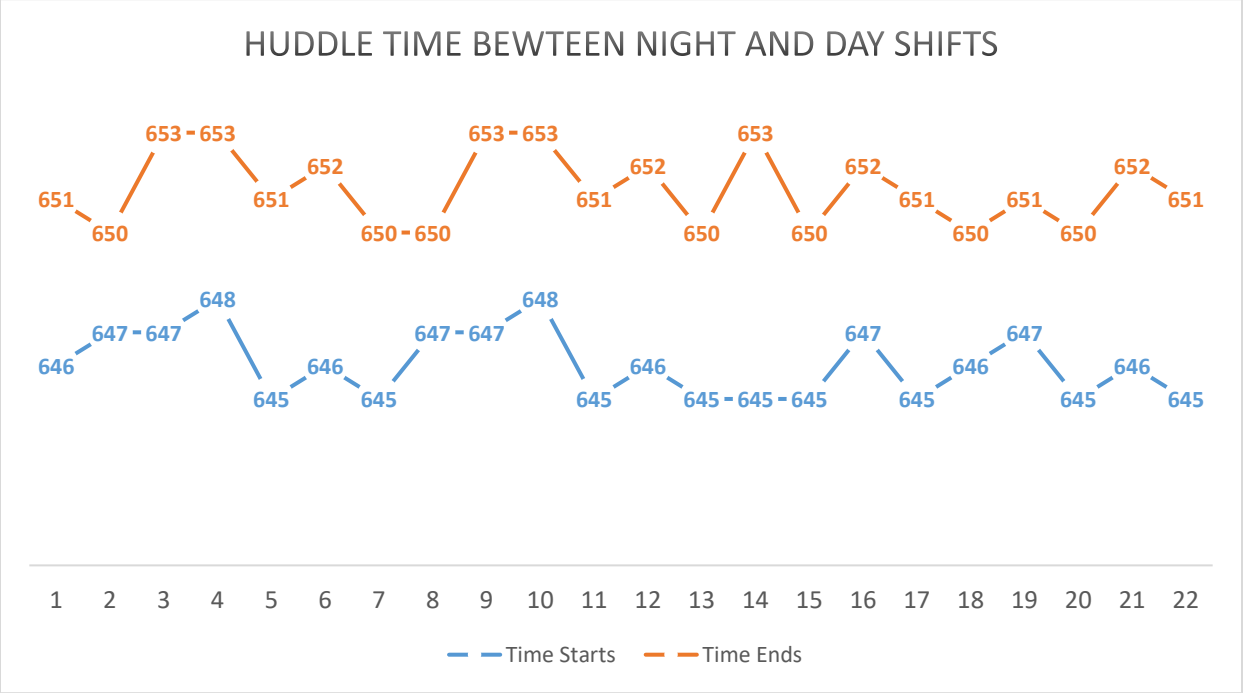


Figure 3

Monitoring Huddle Time between Night and Day Shifts



Section V. Discussion

Productivity Report

Many factors contributed to the IOT results in the productivity report. For the past 3 years, IOT was never a focus in process improvement. With the current manager on the unit, the process to improve IOT became a priority among other metrics.

Hours per patient day (HPPD) is the unit of measure that hospitals use to manage staff and keep the budget on track in the acute care setting (Lockhart, 2019). HPPD is budgeted every year and is the benchmark of financial utilization in a nursing unit. It refers to the overall time expended by nurses and nursing assistants on the unit per patient day, excluding vacation, sick time, orientation, education leave, or committee time. Time was calculated as the number of productive hours worked by all nursing staff with direct patient care responsibilities divided by in-patient days (Kalisch et al., 2011).

As shown in Table 1, several factors affect the goal of the productivity index above 100%. IOT, sitter cases, and missed meal/breaks can be managed on a shift-to-shift basis, with the goal being to utilize it minimally, or within a budget range.

PP6 had the highest IOT hours; however, there were 3,172 hours of productivity and a variance of only -83 to productive hours. This did not seem to affect the productivity index, as it attained a 97% score. The same was true for PP7. PP8, however, provided an interesting scenario, as nonproductive hours and sitter cases drove its productivity index to 93%.

PP9 and beyond was the pay period monitored when this project commenced. PP9 shows a 97% productivity index; however, an IOT of 43.39 prevented it from attaining the goal of over 100%. PP10 showed a similar trend in movement. PP11, however, attained a productivity index

of 106%. In this pay period, there were 3,003 hours of productivity and a low IOT of 32.66 hours. There was also low utilization of nonproductive hours in this pay period.

On the other end of the spectrum, PP12 and PP13 were on the red mark for the productivity index, at 93% and 89%, respectively, since the start of this project. PP12 nonproductive hours, sitter utilization, and IOT drove its low productivity. PP13 was the lowest ever, at 89% productivity. Though it shows an IOT of 20.81 hours, below the goal of 22 hours, the variance to target productive hours was the lowest, at -239. This was affected by a no change in OT% of productive hours. Moreover, 2,170 hours of productivity that may have resulted from low census and skill-mix ratios could have netted the productivity index of 89%.

Use of Handoff Report Tool

The use of the handoff tool was a challenge at the start of the project. Leadership did not approve its implementation to all nurses because of the multitude of tasks the nurses already had and the possibility of union disagreement. Instead, the “brain” in the EPIC health connect (electronic health record use in the facility) was chosen as the handoff tool, as all components on the ISBARED/ISHAPED were there. Eliminating redundancy or wasteful processes is also in alignment with Lean principles.

Despite this setback, a PDSA comprising six nurses was chosen to use the hand-off tool to determine if a new tool could facilitate handoff reports, eliminate time consumed in writing information, and decrease IOT. The ISBARED/ISHAPED hand-off tool was revised based on how it suited the six nurses (see Appendix J).

Nurses said that though the tool facilitated handoff and so was the brain in Healthconnect, nurses’ work ethics significantly impact NKE. Some nurses wanted highly detailed information that was not appropriate during handoff and would unnecessarily lengthen

the usual reporting time. This particular action does not follow the NKE process and the nurse leaders' Gemba process can be an important factor in addressing it.

The efficiency of this tool could be felt if outgoing nurses completed the information at the end of their shift and handed the completed form to incoming staff during handoff. This process would have eliminated the 5-minute review of patients' charts and easily facilitate handoff, but leadership is bound by union agreements. Therefore, small experiments such as this can demonstrate how this evidence-based tool can improve flow at the change of shift and provide a comprehensive communication tool for the NKE.

In the context of the Lean process, another form to complete is a wasteful process, especially when pertinent information on the ISBARED tool can be found in the brain of HealthConnect. Adjusting to using the brain will take time, as most nurses reported preferring to document pertinent information by writing it "somewhere." Though nurses have been trained about using the brain before it became part of the EPIC workflow, nurses' believed it gave a general view for handoff. However, each nurse had an individual method of workflow, and writing pertinent information is still a big part of their process since they are not always near a computer and want the information readily available on paper. To this day, nurses still write information from handoff and a standardized tool such as the ISBARED/ISHAPED (See Appendix J) would have been instrumental if all incoming and outgoing use it in handoff.

Elimination of Chart Reviews

The elimination of chart reviews was also held up due to union agreements. The review of patients' charts was kept, but limited to a maximum of 5 minutes. Staff had to be observed by leaders during their Gemba walk for compliance during shift change, as nurses were accustomed to reviewing charts for 10 to 15 minutes.

To decrease IOT, 5-minute huddles started on time on most days (start-up times average a minute over, but still well within 5 minutes) and nurses were asked to get reports 5 minutes to the hour. Nurses who had compliance issues and were repeatedly reported by outgoing staff were given feedback during the Gemba process or became the subjects of discussion within investigatory meetings.

Performance Expectation, Accountability, and Gemba Walk

The Gemba walk of the nurse leaders at the start of every shift ensured that no processes were wasted. Five minutes to the hour, incoming nurses were asked to get a report at the bedside. Nurse knowledge exchanges were audited randomly and hourly during shifts. Last-hour rounds tackling the four Ps (pain, potty, position, and periphery) was encouraged every hour during the day, except at night time and especially an hour before shift ends to prepare for the upcoming shift changes.

The process to reduce IOT was also discussed during direct report rounds and one-on-one meetings with concerned staff with or without their union representative. It involved informing the nurse leader of a possible IOT early in the shift, stating minutes of IOT, and logging it on the IOT form. Informing the nurse leader early on shift will allow management to channel resources where needed by a particular RN or unit to help decrease IOT.

Follow-up with nurses habitually accruing IOT and not following the NKE processes helped change behaviors and improve workflow processes. Investigatory meetings, direct rounds, and one-on-ones made these nurses aware of processes and the reasons for monitoring finances. The Gemba process led to sit-down meetings with concerned staff and significantly helped decrease IOT in PP13. Facilitation of flow during shift change also helped nurses to get clocked out on time. New signage was placed on the assistant nurse managers' office door to

encourage the limiting of office transactions during the shift and not at the start of the shift (see Appendix K). It emphasized ensuring that incoming and outgoing PCTs and all other support staff were at patient care units to help answer call lights and attend to patients especially at shift change.

The sit-down process regarding IOT, especially to those with ongoing IOT every PP, may seem punitive. It was disappointing to many and some considered it a tipping point in their reason for leaving the unit. The process, however, allowed nurses to refocus on performance expectations, roles, and accountability to financial stewardship. It also allowed nurse leaders to ask nurses what would help and support them in their goal of decreasing IOT. It provided an opportunity for nurse leaders to ask nurses' needs to be able to support and coach them in their goal of decreasing IOT.

In an attempt to decrease IOT, night shift nurses did a small change on their workflow. When assignments are made for incoming staff, outgoing night nurses plan ahead in terms of how many competencies (stroke and step-downs) and nurses need a report. They cluster giving hand-offs to incoming staff and agree on a systematic way to give handoff. This was a creative initiative invented by night shift nurses to hurdle IOT issues and clock out on time despite the competencies of the unit.

Huddle Time

Time spent on huddles between two incoming shifts averaged 4.99 minutes and was not considered a cause for IOT. Leadership wants mid-shift huddles on every shift to circle back on nurses so that assistant nurse managers on shift can identify barriers that will cause nurses to stay beyond their shift and incur IOT. However, mid-shift huddles are a challenge to do because they are greatly dependent on the number of nurses available at a given time. Instead, the staff are

encouraged to follow the IOT process and escalate at mid-shift when they think they are behind with their care.

Conclusion

Efficient allocation and management of labor hours raise revenues (Suby, 2020). In an acute care setting, factors that may play a role in patient care, resources, and IOT affect the goal of attaining the target productivity index. Utilization of sitters, missed meal/breaks, and IOT has established processes and flows that, when utilized properly, do not affect productivity. When staffing levels accurately meet work projections, organizations save money and increase satisfaction in both their workforce and customers, resulting in better service to all (Suby, 2020). However, acute settings are fluid and may still be vulnerable to factors that have important functions in running the unit. Though healthcare leaders strive to staff resources for optimal productivity, staffing resources can never be accurate; hence, financial stewardship should be everyone's business and responsibility.

Financial stewardship of IOT regulation has been overlooked by this unit for years and considered acceptable by many. The number of competencies is an insufficient argument for IOT. Additionally, matters of money, budgets, or finances have been viewed as the concern of management, but not by employees. Consequently, nurses have formed a culture that has expected management to provide help instead of finding their creative ways to improve processes or make changes to decrease IOT. The ISBARED/ISHAPED handoff tool is an effective means to address the flow of information during nurse knowledge exchanges at the bedside, as it is an evidence-based, standardized form. However, its success requires purposeful use that can prove difficult when doing so challenges existing work processes and/or work culture.

Work culture is the most difficult factor to change and takes a long time. Culture is expressed in fundamental beliefs, assumptions, attitudes, values, artifacts, and behaviors of organizational members, and the stronger it is the higher it can affect organizational effectiveness (Gochhayat et al., 2017). Work culture impacts the work environment and productivity and, as such, impacts ease of change. A change in work culture towards collaboration and team spirit tremendously enhances positivity among staff and improves productivity.

With the collective bargaining agreement due next year, wasteful processes such as chart reviews before handoff should be reexamined. An evidence-based tool, such as ISBARED/ISHAPED, should become part of normal workflows in the unit. A study by CRICO Strategies found that communication errors accounted for over 1,700 deaths and $1.7B in additional costs to the healthcare system (Ward, 2020). This study, according to Ward (2020), analyzed 23,000 medical malpractice claims filed between 2009 and 2013 and found that communication problems were contributing factors in 30% of the cases.

ISBARED/ISHAPED (an SBAR derivative) provides all relevant information and is the current “best practice” to deliver information (Müller et al., 2018). The electronic health record (Healthconnect Brain) and written documents, such as this tool, along with the verbal exchange during handoff, should ensure that pertinent information is transferred. Though the tool may seem like it requires additional paperwork, the benefits of error prevention and increased revenue from decreased IOT cannot be overlooked and proves that the 5-minute review is not needed.

If this facility is going to provide affordable care to its members, teamwork must prevail among nurses and they must strive to think outside the box and beyond their comfort zones. Nurses can no longer assume that resources are always provided, but should manage their resources, including time at work, sustainably and not perceive overtime as an allowed provision.

They should want to participate in quality improvement projects that strive to provide excellent, safe, and affordable care to their facility's members, even when it challenges their traditional work culture toward financial resources, like overtime. The question is, "Are the nurses ready to take this challenge?"

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Section VII. Appendices

Appendix A: Evaluation Table

PICOT Question: In neurological patients (P), how does the use of IPASSBATON and elimination of checking patient data before handoff report (I) compared to no intervention (C) decrease incremental overtime (O) in two months (T)?

Study	Design	Sample	Outcome/Feasibility	Evidence rating
Jeffs, L., Grinspun, D., Closson, T., & Mainville, M. (2015). Identifying strategies to decrease overtime, absenteeism, and agency use: Insights from healthcare leaders. *Nursing Leadership, 28*(3), 23-39. https://doi.10.12927/cjnl.2016.24463 PROJECT 2 Strategies to Decrea	Qualitative study design using semi-structured interviews and thematic analysis	Healthcare leaders: 23 Hospital sites: 16 Ontario, Canada.	Two main themes emerged: (1) enacting proactive human resource practices and (2) having strong, caring, and strategic leaders that create learning and supportive work environments. Insights gained from this study may offer healthcare leaders strategies to maximize the nursing workforce and minimize overtime, absenteeism, and agency use to ensure safe, efficient, and quality healthcare.	VB
Malfait, S., Hecke, A. V., Biesen, W. V., & Eeckloo, K. (2018). Do bedside handovers reduce handover duration? An observational study with implications for evidence-based practice. *Worldviews on Evidence-Based Nursing, 15*(2), 432-439. https://doi.org/10.1111/wvn.12330. PROJECT 2 BEDSIDE HANDOVER.pdf	A multicentered longitudinal study	Individual patient observations: 638 September 1, 2016 to January 30, 2017.	On average, a bedside handover takes 146 s for one patient (83 s–204 s). Depending on the previously used handover model, the number of patients allocated to each nurse, and the use of a structured handover content, time gain, or loss as a result of introducing the bedside handover can be expected. Structured or uniform handover content can help hasten bedside reports.	IIIB

Study	Design	Sample	Outcome/Feasibility	Evidence rating
Pakcheshm, B., Bagheri, I., & Kalani, Z. (2020). The impact of using "ISBAR" standard checklist on nursing clinical handoff in coronary care units. *Nursing Practice Today 7*(4), 266-274. https://doi.org/10.18502/npt.v7i4.4036.  PROJECT 2 ISBAR.pdf	Quasi-experimental study	Handoffs: 564 Nurses: 24 Two coronary care units in 2017	The results showed that there was a significant increase in the frequency of providing information (P <0.001) on patient identity, current situation, clinical history, system status review, and recommendations.	IIB
Tacchini-Jacquier, N., Hertzog, H., Ambord, K., Urben, P., Turini, P., & Verloo, H. (2020). An evidence-based, nursing handover standard for a multisite public hospital in Switzerland: Web-based, modified Delphi study. *Journal of Medical Internet Research, 3*(1),e17876. https://doi.10.2196/17876.  PROJECT 2 Evidence-Based.pdf	Modified, multi-round, web-based, Delphi data collection survey.	Anonymized panel sample of 264 nurse experts working at a multisite public hospital in Switzerland.	The study presents the items selected by consensus for an evidence-based nursing handover standard for inpatients for use at shift changes or internal transfers. It also presents the reasons why survey items were or were not included. A standardized, hospital-wide, shift-to-shift nursing handover process encourages nursing care teams to conscientiously share information that is essential to the continuity of care.	VB
Watanabe, M., & Yamauchi, K. (2019). Subtypes of overtime work and nurses' fatigue, mental status, and work engagement.: A latent classic analysis of Japanese hospital nurses. *Journal of Advanced Nursing, 77*(3), 1567-1577. https://doi.org/10.1111/jan14710.  PROJECT 2. Subtype of OT.pdf	Cross-sectional design	Full-time nurses: 1,075 Hospitals in Japan: 4 October 2015 to February 2016.	Identified five types of overtime workers differing greatly in fatigue, mental status, and work engagement. "Highly involuntary overtime workers," who worked overtime for both of the given involuntary reasons, experienced the strongest fatigue, were the most mentally distressed, and had the lowest work engagement. Incremental or incidental overtime is involuntary, which may result in fatigue, distress, and low work engagement aside from the fact that it affects productivity or labor costs.	IIIB

Appendix B: 4th Floor Inpatient Unit Profile

Inpatient Unit Profile

A. Purpose: Why does your unit exist? The 4th-floor units exist to care for neurologically impaired patients.

	Site Contact: Sandy Sharon	Date: 9/29/2020
Administrative Director: Esperanza Chavez	Nurse Director: Gertrude Tiangco	Medical Director: Yogesh Nandan

B. Know Your Patients: Take a close look into your unit, create a "high-level" picture of the PATIENT POPULATION that you serve. Who are they? What resources do they use? How do the patients view the care they receive?

Est. Age Distribution of Pts:	**%**
19-50 years	21
51-65 years	32
66-75 years	26
76+ years	21
% Females	51

List Your Top 10 Diagnoses/Conditions	
1. Spinal stenosis	6. ICH
2. Ischemic stroke/ICH	7. Benign neoplasm
3. Sepsis	8. Trauma SDH
4. Malignant neoplasm	9. Spondylosis
5. Disc disorders	10. Spondylolisthesis

Patient Satisfaction Scores		% Always
Nurses		89.4
Doctors		92.3
Environment		82.6
Pain		89.4
Discharge	% Yes	87.2
Overall	% Excellent	85.7

Living Situation	**%**
Married	67
Domestic Partner	17
Live Alone	1
Live with Others	2
Skilled Nursing Facility	11
Nursing Home	1
Homeless	1

Point of Entry	**%**
Admissions	
Clinic	1
ED	75
Transfer	24
Discharge Disposition	**%**
Home	56
Home with Visiting Nurse	21
Skilled Nursing Facility	17
Other Hospital	2
Rehab Facility	3
Transfer to ICU	1

Pt Population Census: Do these numbers change by season? (Y/N)	**Y/N**
Pt Census by Hour	Y
Pt Census by Day	Y
Pt Census by Week	Y
Pt Census by Year	Y
30 Day Readmit Rate	Y
Our patients in Other Units	Y
Off Service Patients on Our Unit	Y
Frequency of Inability to Admit Pt	Y

Patient Type	**LOS avg.**	**Range**
Medical	7 days	4-9 days
Surgical	3 days	2-5 days

Mortality Rate 1%

C. Know Your Professionals: Use the following template to create a comprehensive picture of your unit. Who does what and when? Is the right person doing the right activity? Are roles being optimized? Are all roles that contribute to the patient experience listed?

Current Staff	**Day FTEs**	**Evening FTEs**	**Night FTEs**	**Weekend FTEs**	**Overtime by role**
MD Total	5	5	2	5	
Hospitalists Total	3	3	1	3	
Unit Leader Total	2.6	1.5	1.6	0.8	
CNSs Total					
RNs Total	10	10	10		
PCTs Total	5	5	2		
UAs Total	2	2	0.125		
Residents Total	2	2			
Technicians Total					
Secretaries Total	1				

Admitting Medical Service	**%**
Internal Medicine	35
Hematology/Oncology	1
Pulmonary	1
Family Practice	1
ICU – neurosurgery	36
Other (Orthopedics & Surgery)	26
Supporting Diagnostic Departments	
(e.g. Respiratory, Lab, Cardiology, Pulmonary, Radiology)	

Clinical Resource Coord.	4	1				
Social Worker	1	1				
Health Service Assistants	3	3	1			
Ancillary Staff						

Do you use Per Diems? ___x___Yes _____NO	**Staff Satisfaction Scores**		**%**
Do you use Travelers? ___x___Yes _____NO	How stressful is the unit? High-stress level	% Not Satisfied	
Do you use On-Call Staff? ___x___Yes _____NO	Would you recommend it as a good place to work?	% Strongly Agree	
Do you use a Float Pool? ___x___Yes _____NO			

***Each staff member should complete the Personal Skills Assessment and "The Activity Survey," pgs. 10 - 12**

D. Know Your Processes: How do things get done in the microsystem? Who does what? What are the step-by-step processes? How long does the care process take? Where are the delays? What is the "between" microsystems hand-offs?

1. Create flow charts of routine processes.	**Do you use/initiate any of the following?**	**Capacity**	# Rooms _32__	# Beds_40____
a) Overall admission and treatment process b) Admit to Inpatient Unit c) Usual Inpatient care d) Change of shift process e) Discharge process f) Transfer to another facility process g) Medication Administration h) Adverse event	Check all that apply x Standing Orders/Critical Pathways x Rapid Response Team x Bed Management Rounds ☐ Multidisciplinary/with Family Rounds ☐ Midnight Rounds x Preceptor/Charge Role x Discharge Goals	**# Turnovers/Bed/Year** _____ **Linking Microsystems** (ER, ICU, Skilled Nursing Facility, Acute Rehabilitation,		

2. Complete the Core and Supporting Process Assessment Tool, pg. 14

E. Know Your Patterns: What patterns are present but not acknowledged in your microsystem? What are the leadership and social pattern? How often does the microsystem meet to discuss patient care? Are patients and fa involved? What are your results and outcomes?

• Does every member of the unit meet regularly as a team? Yes		• What have you successfully changed?
		• What are you most proud of? Kaiser Sacramento was awarded being a comprehensive stroke center for 6 years.
• How frequently? Monthly	• Do the members of the unit regularly review and discuss safety and reliability issues? Yes	• What is your financial picture? The goal is to stay within the budget given the various challenges of allotting resources for sitter cases.
• What is the most significant pattern of variation?		***Complete "Metrics that Matter," pgs. 20 & 21**

Appendix C: SWOT Analysis

Appendix D: Survey Tool

SURVEY

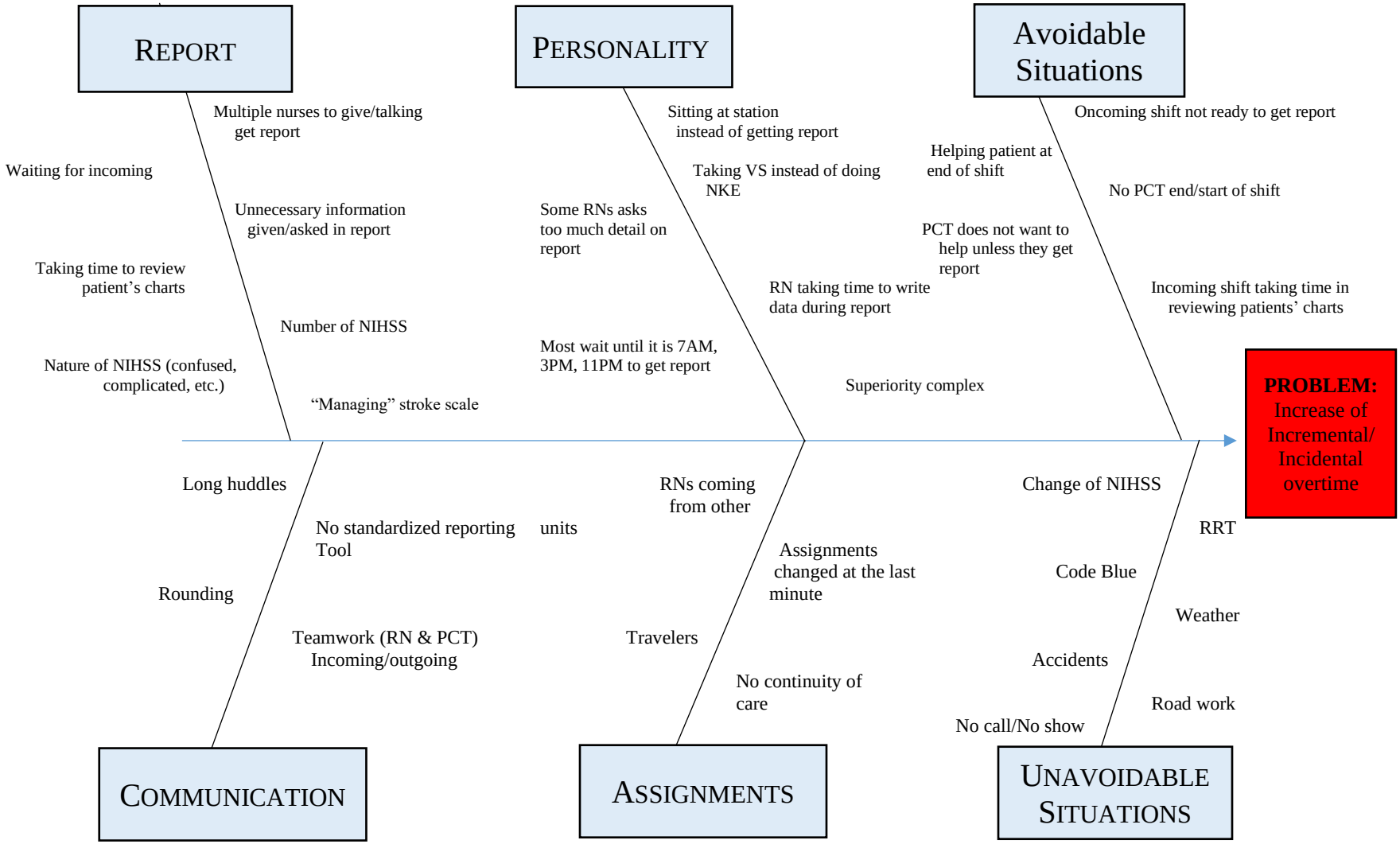
1) **What causes delays in giving NKE**? CHOOSE 2.
   a) Oncoming shift not ready to receive report (Reason: _____
   b) Oncoming shift taking time to review patients' charts in HC
   c) Helping patient at end of shift
   d) Nurses not available to receive report (Reason: _____
   e) Other: _____

2) **What matters to you in making patient assignments**? CHOOSE ONE.
   a) Zoning (all or most of your patients in 1 or 2 places only)
   b) Acuity (numbers)
   c) Number of NIHSS
   d) Other: _____

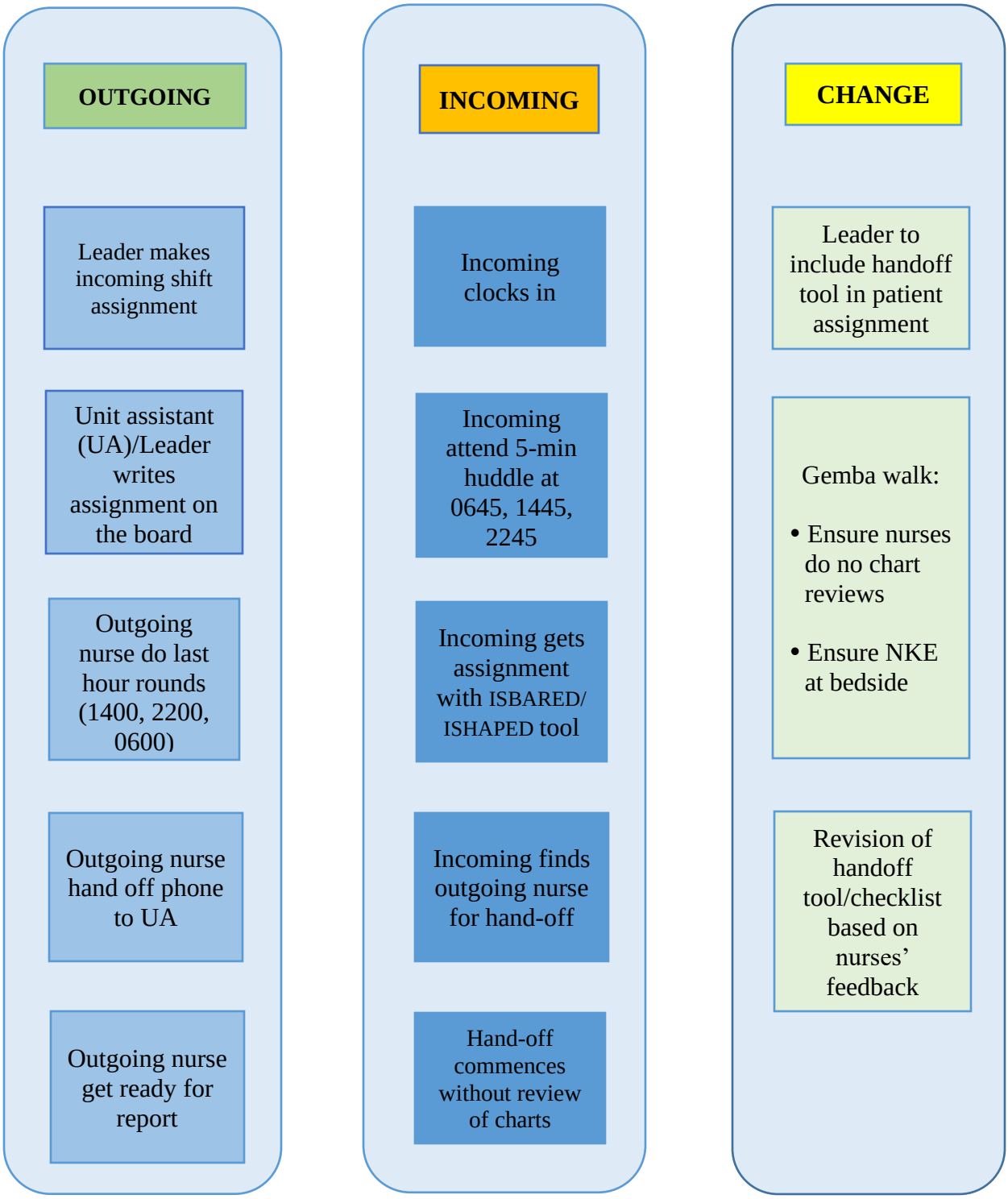
3) **What causes a long report**? CHOOSE THREE.
   a) Unnecessary information asked (i.e. nurse questions assessment, the nurse asks too many details)
   b) Unnecessary information given
   c) Multiple nurses to give/get reports to/from
   d) Number of NIHSS
   e) Nature of NIHSS (i.e. complicated, confused, hard of hearing, language, etc.)

4) The use of a standardized tool/checklist help from delays in giving/getting reports and prevents essential information from getting missed. Do you know of one?
   a) Yes: _____
   b) No
   c) Suggestions: _____

Appendix E: Fishbone Diagram



Appendix F: Project Process Map



Appendix G: Bedside Report Tool

Date/Time	**Patient-Centered Bedside Report Tool**		
Introduction	Patient label:	Room#:_____ Code status:_____ Attending:_____ Consults:_____ Primary Contact Information/DPOA:_____	
Story	CC: Communication Issues: Admission Process:	_____ Diagnosis _____ Interpreter? ■Yes ■No Language _____ Deaf/Blind/HOH/Blind_____ ☐ Admission ☐ Med Rec ☐Pt Belongings CLOF/PLOF _____ MST ____	
Background/History	Past Medical History: Allergies:		
Assessment	Last Vital signs: Pain: IV Access: Drips: Abnormal Labs: Accu checks: Neurological Status: Mobility/Fall Risk: Cardiovascular: Respiratory: GI: GU:	Freq____Time _____ BP _____ HR _____ R _____ Temp _____ O2 Sat____ _____ Pain Medication/Last Given _____ Type: PIV/PICC/CL _____ Bath _____ _____ _____ Covered _____ Frequency _____ _____ _____ PT recommendation _____ Equipment _____ Other _____ Telemetry _____ Rhythm _____ Pacemaker _____ Oxygen _____ Incentive Spirometer _____Other _____ Diet _____☐ Feeder ☐ Assist ☐ Independent ☐ Tube feed via_____ Rate____ Last BM _____ NGT/PEG_____ Voids ___ Foley__ Indication _____ Due to Void _____	

	SKIN: Psychosocial/Family:	Purewick/Condom___ Straight Cath 1 2 ___ 2 RN ___ Checklist ____ _____ _____ SACHAPU_____ ANM _____ Photo _____WOCN _____ BED _____ Dressing _____ Frequency_____ Medication _____ Restraints _____ Soma _____ Sitter _____ Other _____
Recommendations/ Plan	Today's Goals:	
Error-prevention	Isolation: Fall Risk: HAP: SKIN:	_____ Confused___ Rails ____ Bed alarm __ Medication ___ Restraints__ Toileting Schedule ____ Soma _____ ETOH____ Seizure _____ IS_____ RT Consult_____ HOB____ Teethbrushing _____ Ambulated ____ Turned ____ Eating/Nutrition _____
Dialogue	Care Experience: Other Concerns:	Bath ____ MMM _____ GTKY _____ Family Needs_____

Appendix H: Project Charter

Project Charter

Pilot Project to Decrease Incremental Overtime through ISBARED/ISHAPED tool and elimination of reviewing patients' charts before handoff report

Global Aim

Decrease Incremental Overtime (IOT).

Specific Aim

Decrease IOT from 49.37 hours to 22 per PP through the use of the ISBARED/ISHAPED tool, elimination of reviewing patients' charts before handoff report and intensification of the Gemba Walk.

Background

In this medical facility, the mission of providing affordable quality care drives its core financial stewardship. To attain this, operating expenses should be contained within the budget to make healthcare affordable to its members. Ultimately, fiscal stewardship of healthcare resources can promote population health by increasing access to affordable care, reducing pressure on health care institutions to cut back on important services, freeing up resources on health care institutions to cut back on important services, freeing up resources for other activities that improve health in given geography (Arias, 2020).

Shift handoff communication at the bedside reflect the principles of patient-centered care and can result in benefits that include financial savings, increased accountability, mentoring opportunities, and increased safety and patient satisfaction (Lin et al., 2015). Nurse knowledge exchange (NKE) lasts approximately ten minutes per patient and the goal is to involve patients in the conversation to clarify issues, answer questions and agree on the plan of care.

The stroke unit in this medical facility is a skill-mixed competency level unit composed of stroke, neuro stepdown, epilepsy monitoring, telemetry, and medical-surgical patients. The expected practice is that after the five-minute huddle, nurses are supposed to receive bedside handoff report immediately. However, off-going nurses wait for incoming nurses as they take time to look at patients' charts before they start getting handoff reports. This activity takes approximately ten to fifteen minutes. The reason for this is that, neurology patients are "complicated" and that some nurses do not give a thorough report of their patients. This habit is a traditional nursing practice that may not be financially sustainable as it creates wasteful time to look over patients' data when handoff reports can do the same objective. Based on the lean methodology, a wasteful practice such as this should be eliminated as it hinders the flow of work and incurs financial waste through incremental overtime. As a result, the productivity report for PP6 in 2021 resulted in 49.37 hours of IOT compared to the target of 22 per PP.

In this project, incremental or incidental overtime is defined as early clock-in/late clock-out, inability to complete required tasks by the end of the shift, or shift transition conflicts (handoff late or last-minute attending to patients' needs).

The absence of a standardized tool or checklist used in handoff may prevent effective communication between shifts, a greater chance of essential information being missed during the report, and the cause why incoming shifts review patients' charts before getting reports.

Sponsors

Chief Nursing Executive	L.D
Clinical Director	E.C
Unit Manager	T. H.

Goals

The primary purpose of this project is to decrease incremental overtime and meet its target goal of nine hours per week in two months by the following strategies:

1. Immediate handoff report – eliminating review of patients' charts
2. Use of ISBARED/ISHAPED handoff tool during bedside report
3. Grouping of nurse assignment based on nurses' feedback of common causes that takes time in giving report

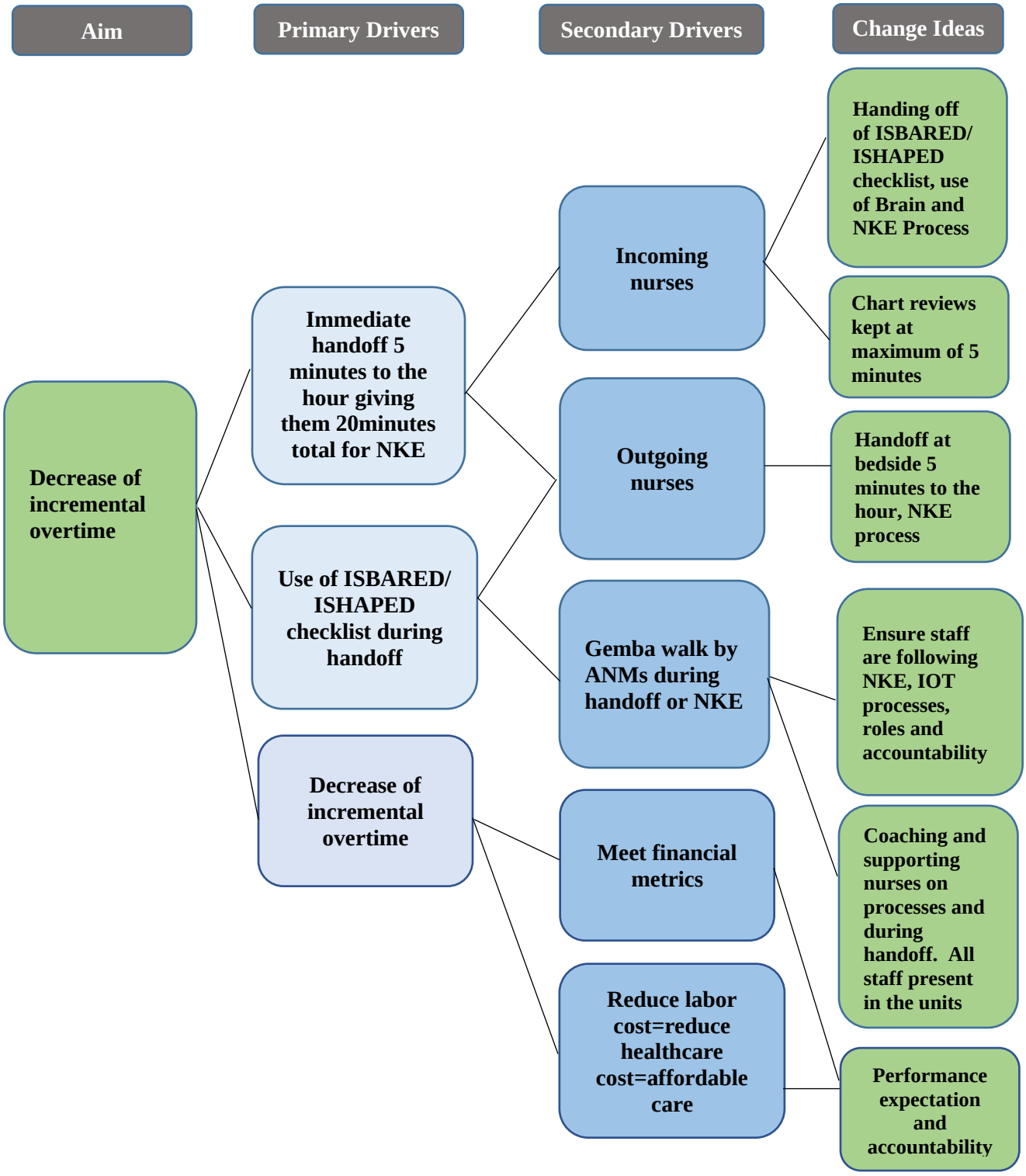
Measures

Measure	Data source	Target
Outcome		
Hours of incremental time per week	Productivity report	Decreased to 22 hours PP
Process		
Handing off of standardized tool/checklist form to 6 nurses (control).	Feedback	100%
Number of nurses immediately getting report (after five minutes of chart review)	Daily audits during handoff	100%
Gemba Walk of nurse leaders	Compliance of NKE & IOT processes, awareness, roles, coaching individual nurses, investigatory meetings, collaboration and accountability to decrease IOT	80%
Balancing		
Nurses' engagement and readiness to change practice	Daily audits during handoff	100%

Team Members

Project Lead	S. B.
RN Director	E. C.
Unit Manager	T. H.

Driver Diagram



Measurement Strategy

Background (Global Aim): Decrease incremental overtime through the use of ISBARED/ISHAPED tool checklist and elimination of reviewing patients' charts before handoff/NKE

Population Criteria: Incoming and outgoing nurses during the change of shift

Data Collection Method: Data will be obtained from the productivity report per pay period

Data Definitions:

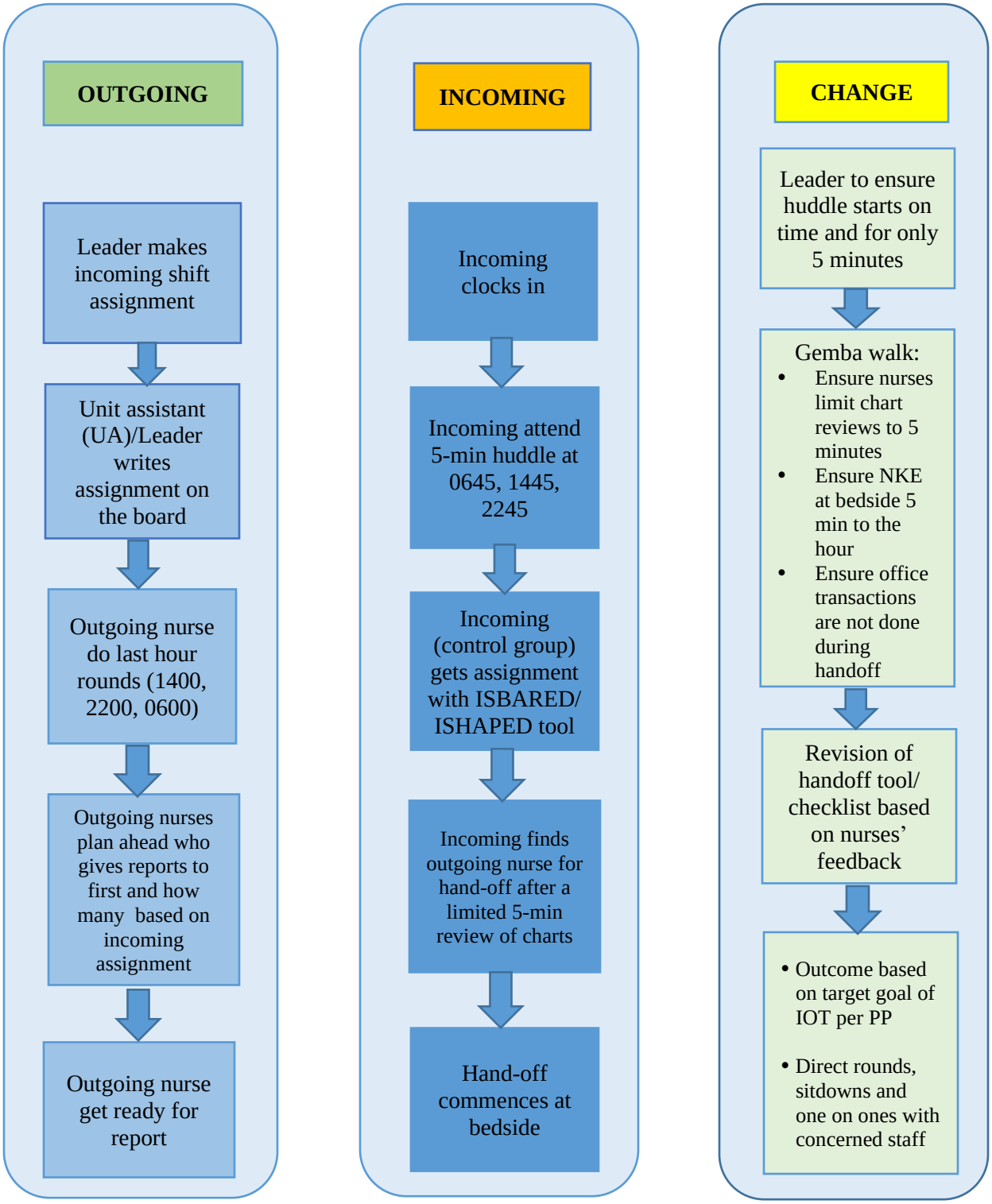
Data Element	Definition
NKE	Nurse knowledge exchange or handoff report
ISBARED/ISHAPED	Introduction, Situation, Background, Assessment, Recommendation, Error Prevention, Dialogue (ISBARED/ISHAPED) Appendix B
Gemba Walk	A Gemba walk is the term used to describe the personal observation of work – where the work is happening. ANM rounds.

Measure Descriptions:

Measure	Measure Description	Data Collection Source	Goal
Reasons for delays of NKE	Feedback from staff from all shifts regarding delay of NKE in the stroke unit	Survey	100%
Limiting review of patients' charts to 5 minutes	N=number of conforming nurses	ANM Gemba walk	100%
Use of ISBARED/ISHAPED tool or checklist (see Appendix B)	Feedback from the 6 nurses (control)	Control group	80%
Decrease of IOT	22 hours per PP or less of IOT per PP	Productivity report per pay period (PRISM)	100%

Changes to Test

The handoff workflow or process map.



Project Timeline:

	01/2021	02/2021	3/2021	4/2021	5/2021	6/2021 to 8/2021
Define the project						
Develop the aim						
Microsystem assessment						
Develop charter						
Create measurement, outcomes, processes, and balancing						
Review literature						
Identify changes to test						
Driver diagram						
Complete charter						
Evaluation & ongoing performance improvement						

Clinical Nurse Leader Competencies

The Clinical Nurse Leader applies business and economic principles and practices to make healthcare affordable (King et al., 2019). The CNL role through stewardship thinks of strategies and interventions to make processes and practices efficient and effective. When these measures eliminate wastes and streamline healthcare activities to improve the care environment economically, the CNL attains some if not many financial goals to affect equity in health outcomes. As a team leader, the CNL develops an understanding of how healthcare delivery systems are organized and financed to make them affordable for all (King et al., 2019).

The Clinical Nurse Leader (CNL) has been described as a leader whose purpose is to improve processes of care to improve quality and safety in patient care (L'Ecuyer, 2016). Improving processes of handoff, the CNL will perform its role as a team leader, system analyst, and nurse navigator. This is a pilot project supported by unit leadership applying the principles of lean methodology to make care transitions effective and economical.

Appendix I: Evidence-Based Change of Practice Project Checklist

STUDENT NAME: **Bucao, Sheila**

DATE: **April 09, 2021**

SUPERVISING FACULTY: **Connor, Tara**

Instructions: Answer YES or NO to each of the following statements:

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

Project Title: The Use of ISBARED/ISHAPED and Elimination of Reviewing Patients' Chart before Handoff to Decrease Incremental Overtime	**YES**	**NO**
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	YES	
The specific aim is to improve performance on a specific service or program and **is a part of usual care**. ALL participants will receive standard of care.	YES	
The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case-control). The project does **NOT** follow a protocol that overrides clinical decision-making.	YES	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **NOT** develop paradigms or untested methods or new untested standards.	YES	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **NOT** seek to test an intervention that is beyond current science and experience.	YES	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	YES	
The project has **NO** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	YES	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., **not** a personal research project that is dependent upon the voluntary participation of colleagues, students, and/ or patients.	YES	
If there is an intent to or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: *"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."*	YES	

Appendix J: Revised Handoff Tool

Date		Patient 1	Patient 2
I	**Patient Centered Bedside Reporting Tool**	Patient Initial Room#:_____ Code Status_____	Patient Initial: Room#:_____ Code Status_____
S	**CC:** **Diagnosis** **Communication Issues:** **Admission/Process:**	_____ _____ ---------- CLOF/PLOF MST	_____ _____ ---------- CLOF/PLOF MST
B	**Past Medical History:** **Allergies:**		
A	**Last Vital signs:** **Pain:** **IV Access:** **Drips:** **Protocols:** **Neurological Status:** **Mobility/Fall Risk:** **Cardiovascular:** **Respiratory:** **GI:** **GU:** **SKIN:** **Psychosocial/** **Family:**	 Pain Med/Last given__ Type: PIV/PICC/CL ___ Bath _____ _____ _____ Telemetry _ Rhythm _ Pacemaker Oxygen _____ Diet _____ Last BM _____ NGT/PEG_____ Voids __ Foley__ Indication __ Due to Void _____ SACHAPU _____ANM _____ Photo _____ WOCN_____ _____	 Pain Med/Last given__ Type: PIV/PICC/CL ___ Bath _____ _____ _____ Telemetry _ Rhythm _ Pacemaker Oxygen _____ Diet _____ Last BM _____ NGT/PEG_____ Voids __ Foley__ Indication __ Due to Void _____ SACHAPU _____ANM _____ Photo _____ WOCN_____ _____
R	**Today's Goals:** **Other concerns**		
E	**Isolation:** **HIGH Fall Risk:** **HAP:** **SKIN:**	_____ Confused___ Rails ___ Bed alarm Medication ___ Restraints__ Toileting Schedule ___ Soma __ ETOH____ Seizure _____ IS_____ RT Consult____ Teethbrushing _____ Ambulated ____ Turned ____ Eating/Nutrition _____	_____ Confused___ Rails ___ Bed alarm __ Medication ___ Restraints__ Toileting Schedule ___ Soma _____ ETOH____ Seizure _____ IS_____ RT Consult_____ HOB___ Teethbrushing _____ Ambulated ____ Turned ____ Eating/Nutrition _____
D	**Care Experience:**	Bath ____ MMM _____ Family Needs_____	

Appendix K: ANM Office Signage