



NEW ZEALAND
NURSING
INFORMATICS
CONFERENCE

Addressing the equity divide for nurses
Transformational Technology

CONFERENCE PROCEEDINGS

Thursday 3 November 2016 | SKYCITY Auckland

Conference organised by  **HiNZ**
Health Informatics New Zealand

In collaboration with



Nurse Executives of New Zealand Inc.
DEVELOPING NEW ZEALAND'S NURSING LEADERS

Welcome

The NZ Nursing Informatics conference is designed to inspire and motivate our nursing workforce to become more involved in digital healthcare. Our challenge is to step up and optimize our involvement at all touch points of the healthcare continuum. Currently there are gaps and we need to be mindful unless we embrace technology we will find ourselves working in systems and processes that require much rework, time and effort and don't deliver on improving patient outcomes. This was one key reason we picked our key theme Addressing the equity divide for nurses: Transformational Technology. This is also timely given the release of the refreshed NZ Health Strategy which sets the direction NZ health and disability system need to take in the future.

This is our second joint conference with Health Informatics NZ (HINZ). It follows on from the highly successful inaugural conference in Christchurch 2015. Once again working with HINZ and their impressive networks we have managed to bring you a dynamic programme. This year we were spoilt for choice. Your challenge will be working out which session to seek out. Topics include telehealth, mobile devices, virtual clinics, e Portfolios, 'big data' and Electronic health records to name a few.

Nurse Executives NZ (NENZ) is very proud to be championing this conference. It aligns with our intent to guide and support nurse leaders with knowledge, skills and a passion to go the extra step to make a difference to improving health outcomes for all.

Finally a special thank you to the Auckland Regional NENZ group and conference committee chaired by Rachael Calverley, for their amazing leadership and commitment in hosting this year's nursing informatics conference.

Thank you and enjoy the conference.

Denise Kivell RN, MHSc

**Chairperson
Nurse Executives New Zealand**

nurseexecutivesnz.org.nz

Thank you to the NZNIC-16 review committee

Jean McQueen

Karolyn Kerr

Lee Turner

Pauline Sanders Telfer

Rachael Calverley

Rose Stewart

Sheryl Hunt

Sheryll Beveridge

Wendy Findlay

PRESENTATIONS



NURSE LED VIRTUAL CLINIC FOR VASCULAR SERVICE

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INTRODUCTION

Quality care of vascular surgery patients commences in the pre-operative period and extends to the postoperative coordination of care and long-term surveillance. To meet the challenges of improving health and providing timely, efficient, safer, cost-effective care, technology via nurse led virtual clinics has been introduced to help tackle inequalities and improve access to services for all. Surveillance for abdominal aortic aneurysm (AAA) and post endovascular aneurysm repair (EVAR) is challenging, costly, lengthy and a burden for the patient and health care system.

USE OF TECHNOLOGY AND/OR INFORMATION

Efficient use of technology and data is now a prerequisite for supporting and enabling the key developments needed to reshape the healthcare system. Discussions held with the vascular multidisciplinary team determines the patients to be considered for a virtual clinic. Technology media such as use of telephone and texting were utilised for virtual consultation.

IMPLEMENTATION/PROCESSES

A pilot nurse led virtual clinic was set up in February 2016 - June 2016 for vascular patients mainly on abdominal aortic aneurysm surveillance and post endoluminal aneurysm repair. Face to face consultations were replaced by virtual media. Virtual clinics were documented and captured via a clinic letter and database. To date it has been widely accepted by the patients and health service with positive feedback.

CONCLUSION

It is essential that the expert nurse is knowledgeable, skillful and offers accurate health advice to the patients. Albeit, virtual clinics tend to have a linear format, the expert nurse should be able to identify possible complications. The benefits of this model of care has proven to be successful among both patients and the health service. Benefits reported include effective communication between patients and specialists, reduced travel time and cost especially to those in rural areas. It has improved the patient journey, clinic capacity and proven cost-effective to vascular service.

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IN-HOME TELEHEALTH FOR CYSTIC FIBROSIS - A PILOT

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INTRODUCTION

The Canterbury Adult Cystic Fibrosis (CACF) team see all adults with cystic fibrosis (CF) in the South Island (n=80). Current standards of care recommend people with CF (PWCF) are seen quarterly by a multidisciplinary team trained in CF care. This can provide challenges for PWCF who live in rural or remote locations, and for those who find travel difficult (end-stage disease).

USE OF TECHNOLOGY AND/OR INFORMATION

In areas without regional CF care the CACF team uses the Vivid Solutions hospital telehealth network, however this means PWCF must travel to a video conference site. The use of in-home telehealth was seen a solution. The advantages include providing "better, sooner, more convenient" access to the CACF team (equity), reducing the need for patient travel, reducing cross infection risk for PWCF and facilitating chronic disease management.

IMPLEMENTATION/PROCESSES

A proposal for in-home telehealth was developed in 2015 utilising resources from the NZ Telehealth Resource Centre. The Adult CF patient advisory group approved the proposal. Zoom video conferencing software was chosen. This free, secure, cloud based conference hosting has an app as well as website access to allow use from desk/lap top, notebook or smartphone. From February 2016 in-home consultations for rural and remote patients have been piloted. Patients living rurally were approached and asked if they would like to participate in an in-home consultation. To date everyone has been willing to take part. The service is coordinated by the CF Clinical Nurse Specialist who provides information to the patients on downloading and using the software. Prior to their first formal appointment using Zoom, patients are offered a "test run" with CNS to iron out any technology issues.

CONCLUSION

The CF multi-disciplinary team and patients have found in-home telehealth to be an excellent alternative to a face to face review, when travelling to a regional centre for hospital based telehealth is difficult.

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PATIENT VIEWS AND HEALTH PROFESSIONAL WORKSHOP OUTCOMES TO INFORM A HEALTH LITERACY PROGRAM FOR TELEHEALTH: THE TELEHEALTH LITERACY PROJECT

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2. Southern Cross University, Australia
3. Bond University, Australia
4. University of Queensland, Australia
5. Feros Care Ltd, Australia

INTRODUCTION

Low levels of health literacy are associated with increased hospital admissions, chronic disease incidence, mortality, medication errors and effects people's ability to self-manage their chronic conditions. Group education is an effective format for patient education, however there are barriers for accessing groups face-to-face. We sought to develop a health literacy and self-management patient education program to be delivered by group videoconference to older people in their homes. This paper reports on the development of the intervention, barriers and strategies identified for improvement of health literacy and the final course program.

USE OF TECHNOLOGY AND/OR INFORMATION

Participants were part of the Feros Care remote monitoring National Broadband Network (NBN) pilot project, My Health Clinic at Home and self-selected to take part in the Telehealth Literacy Project (N=52). Following 3 trial group videoconference education sessions, four participants took part in an advisory group by videoconference detailing what was helpful or unhelpful during the sessions and their future needs. Additionally, a health professional workshop involving telehealth nurses used the Health Literacy Questionnaire as a framework for discussion. Furthermore, a literature review of chronic disease self-management programs and patient education best practice was undertaken to inform a 6-week health literacy and chronic disease self-management program for older people.

IMPLEMENTATION/PROCESSES

HLQ baseline data was analysed to inform 9 participant groups. Telehealth nurses had detailed knowledge of participants' health behaviour and were able to identify barriers and strategies for developing health literacy across a range of levels. A key underlying principle was acknowledging clients' autonomy and the right to choose whether they engage in self-management behaviour. Issues relating to an organisations' health literacy were also highlighted.

CONCLUSION

Data from a videoconference patient advisory group, health professional workshop and an evidence-based literature review of patient education can be synthesised to develop a 6-week patient education program to be delivered by videoconference.

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THE DEVELOPMENT AND TESTING OF A CROSS DHB EPORTFOLIO TO SUPPORT THE NURSING COUNCIL PDRP PROCESS

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INTRODUCTION

This paper details the development and piloting of a cross DHB ePortfolio system for Nursing staff using Mahara, integrated with the KoAatea LEARN LMS which is hosted by CMDHB. The Nursing Council of New Zealand requires 5% of nurses to complete a recertification audit every year. CM Health's accredited PDRP comprises of a paper-based portfolio process. Over the last several years CM Health has been investigating e-portfolios with a view to move to this.

USE OF TECHNOLOGY AND/OR INFORMATION

The broader collaborative project focus is one of supporting wider professional competencies, by developing a flexible user-friendly provision for staff which utilises modern and mobile technologies to encourage life-long Learning, development of Learning Communities and the eventual transportability of competencies from one DHB to another via a "passport" approach. This ePortfolio currently has the ability to be used by all 15 DHBs who use the KoAatea LEARN LMS this approach allows us to develop an ePortfolio platform on a low cost scale, which assures an affordable solution for all member DHBs and allows for a development of a profession led approach that insures cross DHB collaboration, the sharing of knowledge and the development of Communities of Practice.

IMPLEMENTATION/PROCESSES

In this presentation, we are going to present CM Health's process for developing and testing the introduction of an e-portfolio to the nursing staff who are part of CM Health PDRP as well as for other health professionals. The steering group for the project operates across 5 DHBs and is led by nursing staff. The primary focus for the project is to support the development of an electronic portfolio process across the DHBs.

CONCLUSION

This presentation will describe the outcomes of the project to date and will outline lessons we have learnt during the testing and implementation stages.

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289 (repeated from HiNZ proceedings)

USING A COMPREHENSIVE COMPUTERISED RISK ASSESSMENT TO REDUCE PATIENT HARM AND NURSING WORKLOAD.

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As clinical lead for the Health Quality and Safety Commission (HQSC) reducing harm from falls programme and Director of Nursing (DON) Whanganui District Health Board (DHB) understanding both latest evidence and national and local data is essential in driving quality care improvement and accountability for the standard of nursing practice.

The development of Whakataketake (Maori for information from many sources) combined risk assessment was driven by the evidence regarding the use of predictive assessment tools and the need to ask the right questions. Supported by nurses saying they complete multiple assessments repeatedly asking the same questions, and nurse leaders concerns regarding the level of critical thinking and individualisation of plans of care being applied. Whakataketake is hosted within the TrendCare system utilised for seven years in Whanganui to measure patient acuity and help drive workforce and care planning.

The presentation will discuss the evidence, the journey of development, implementation, and evaluation as well as demonstrate the computerised assessment tool revealing the added value of data available which has the capability to shape thinking regarding measurement of quality markers and care provision across all health disciplines.

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TRANSFORMING PH NURSES WORKFLOW

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INTRODUCTION

Nurses working in the community need secure remote access to patient and clinical information that reduces their need to travel to base to collect files, re-enter data and/or carry weighty forms and patient files. The secure use and collection of patient information delivers a number of benefits and clinical outcomes, inclusive early intervention, immediate follow-up and reduction of unplanned readmissions.

USE OF TECHNOLOGY AND/OR INFORMATION

Mobile devices, networks and mobile software now provide a seamless secure bridge between Patient Information Systems (PAS) and field usage. The Taranaki DHB has recently empowered their Public Health Nursing team by digitising a number of patient "forms" and clinical review/signoff processes. For the patient, this means that the Nurse has all information from previous visits with them and can secure immediate clinical sign off of planned care without delay. Patients know what's happening immediately, and the recommended care can proceed with delay.

IMPLEMENTATION/PROCESSES

The critical element in the implementation of the Public and Community Health Nursing has been the Communication Plan. The Client IT, Clinical Users and application providers have collaboratively worked at all stages. Changes in workflow have been signed off by the Clinical Users ensuring adherence to clinical and patient guidelines.

CONCLUSION

Strong governance, collaboration, Nursing, Clinical and Senior Management support were key to a successful outcome - one that delivers better patient experiences and outcomes. The key hurdles that the project had to overcome were delays in the setup of the secure end to end infrastructure, and competing resource priorities (people and technology).

Tips:

- Clearly define the problem to solve
- Secure support from Senior Management, Clinicians and Patients
- Involve End Users in the design and review of the solution
- Complete a Benefits Realisation analysis

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PATIENT PRIVACY AND ELECTRONIC HEALTH RECORDS: VIEWS OF COMMUNITY NURSES

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INTRODUCTION

Nurses in community settings are increasingly using digital devices to access patient notes in the home and/or complete electronic records of their visits. They also increasingly have access to multiagency records to enhance integrated care. Privacy and confidentiality are cornerstones of nursing practice and it is essential nurses have a good understanding of both in the use of e-health records and other emerging technology. However, little is known about the attitudes, views, expectations, and practice of nurses in this regard.

USE OF TECHNOLOGY AND/OR INFORMATION

This presentation will discuss the findings of case studies undertaken with nurses working in two community/primary health care settings (one rural, one urban) concerning the use of technology and the practical, confidentiality and privacy issues surrounding access to electronic patient records and notes.

IMPLEMENTATION/PROCESSES

Each site had distinctly different experiences and approaches to the use of e-health records and other technology. In the rural case study, interprofessional communication was enhanced as people knew one another but privacy became problematic for the same reason. Poor integration of multi-disciplinary records and problems incorporating peripheral technology (e.g. cameras) were described. Although nurses had access to some electronic files, this was patchy. In the urban case study, all notes were handwritten in traditional patient files, and lack of shared electronic records across providers and multidisciplinary teams limited the potential of e-records.

CONCLUSION

While nurses in both case studies had good understanding of privacy and confidentiality, for many reasons, the full potential of e-health is far from being realised. Greater understanding of nursing practice requirements, and of the practicalities of the role is urgently required. Nurses also need individualised education, consistent messages and support to integrate e-health into their practice.

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COMMUNICATING & SHARING INFORMATION USING ELECTRONIC MAIL: AN APPRECIATIVE INQUIRY INTO THE ENGAGEMENT, VALUE & FUTURE PRACTICE

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INTRODUCTION

Disseminating information between healthcare professionals is vital to achieve the best possible outcomes for patients. The use of technology to convey information to colleagues is considered a suitable platform, with email a universally accepted method for this function. However, there is an expectation the recipient will open, read and action these messages. To ascertain whether this process actually occurs, a research project is being undertaken to determine what is currently working well and is uncovering ideas to improve connectivity across a large healthcare organisation.

USE OF TECHNOLOGY AND/OR INFORMATION

Literature supports the notion that inequities exist with the use and knowledge of technology. Despite being constant in our lives for several decades, the speed at which technology is evolving has the potential to widen this gap. Change is therefore required to have an engaged workforce with the skills to manage and process information sent electronically. Future technology needs to be generationally friendly with a focus on empowering the workforce to work efficiently and be actively involved during transformational change.

IMPLEMENTATION/PROCESSES

Utilising an Appreciative Inquiry model, focus groups explored workforces' experiences and behaviours, environmental factors and the motivation for various levels of engagement. Subsequently, a thematic analysis generated a number of themes.

CONCLUSION

Findings from the study will inform Healthcare professionals of the human factors influencing interactions with technology such as the awareness for a workforce to care for oneself in a world of connectivity. Recommendations to develop a shared understanding of email etiquette and professionalism along with future ideas to engage all healthcare professionals will be presented.

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RISK ALERT: EMBEDDING A CULTURE OF SAFETY INTO THE ELECTRONIC HEALTH RECORD

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INTRODUCTION

The electronic risk assessment module comprises a suite of validated tools that are employed for assessing individual patients either at the preadmission visit or on the day of admission to hospital. Patients can then be subsequently assessed during their episode of care. All patients are screened using tools including Falls Risk, Pressure Injury, VTE, Malnutrition and Allergies.

USE OF TECHNOLOGY AND/OR INFORMATION

To further enhance patient safety the aim was to create electronic system alerts that notified nurses and other clinicians of actual and potential risk. Upon completion of the assessment scores are calculated and events are triggered that notify clinicians of clinical risk. The clinical risk alert icons are displayed on the electronic patient journey boards, in the pre-op areas, the theatre management system and in the clinical information system. Information can also be transferred from previous episodes in relation to Infection alerts which has been invaluable.

IMPLEMENTATION/PROCESSES

Education was provided by the Nursing Informatics Clinical Nurse Consultant and was supported by clinical nurse educators and other champions across all specialties. The clinical risk assessment program is firmly embedded into the safety culture within the hospital. These screenings are robust and often result in the cancellation or deferral of procedures because of the identification of a new risk issue. The Nursing Sensitive Indicators reflect excellent results when benchmarked against other organisations.

CONCLUSION

The uptake of changing to a new module was slow as clinicians felt it took more time to enter and update the information than the previous module which was quite rudimentary. The compliance rate fell to below 50% in some areas. After consultation with clinicians modifications were made which enabled staff to engage with the program more readily. After four months the compliance rate then rose to >90%. We are currently working on a mobile application that will be released in late 2016.

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IMPLEMENTING A SHARED ELECTRONIC PERSONALISED CARE PLAN ACROSS THE HEALTHCARE CONTINUUM

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INTRODUCTION

Counties Manukau Health has developed an approach to improve outcomes for patients with long term health conditions. This planned proactive care model for patients mandates the use of a Shared Electronic Care Plan and summary record for each patient.

USE OF TECHNOLOGY AND/OR INFORMATION

Clinicians working in partnership with patients enrolled in the approach develop a personalised goal based care plan on an IT system. This is visible across primary, secondary and community services for relevant clinicians. In addition, it includes a secure messaging function thus allowing clarity of roles and responsibility for the patient's care team members.

IMPLEMENTATION/PROCESSES

There was a phased implementation of the initiative from July 2014 over a 1-year period. PHO Practice engagement teams along with DHB "super user" clinicians ran a variety of shared care IT training sessions which ranged from one on one individual sessions, Practice based education meetings to introductory workshops hosted by the DHB. A new role as an identified point of contact for e- shared care promotion and support for training within the DHB was also created in 2014. A quality improvement framework launched in July 2015 focused on auditing care plans and patient survey feedback further incentivised creation of true "patient centred" care plans.

CONCLUSION

To date CMH has 98 Practices using the IT platform with over 20,000 patients with a person centred care plan within the E-Shared care system. More widespread acceptance and use of the Shared Care IT platform has now occurred within the district. However, the major barrier for all Practice team members to support their patients by viewing their Shared Care plan at each patient interaction remains the limited integration with the PMS.

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PREPARING NURSES IN INFORMATICS TO ADDRESS THE EQUITY DIVIDE

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INTRODUCTION

TIGER, standing for Technology Informatics Guiding Education Reform, was formed in 2004 to bring together stakeholders to develop a shared vision, strategies and specific actions for improving nursing practice, education, and the delivery of patient care through the use of health information technology. TIGER aims to ensure nurses are prepared to use informatics and emerging technologies to make healthcare safer, more effective, efficient, patient-centred, timely, and equitable, which aligns with the 2016 New Zealand (NZ) Health Strategy. One outcome of the TIGER Initiative has been the development of nursing informatics competencies.

USE OF TECHNOLOGY AND/OR INFORMATION

The question is how do the international TIGER's nursing informatics competencies compare and apply to New Zealand health competencies?

IMPLEMENTATION/PROCESSES

We will discuss the similarities and differences between the core health informatics competencies of NZ and those recommended by TIGER. The NZ health informatics competencies were developed by the Health Informatics NZ (HiNZ) Education Working Group of academics from all interested NZ universities, drawing on recommendations from the 2006 Health Informatics Capability Development in NZ Report, the International Medical Informatics Association (IMIA) guidelines, the Australasian College of Health Informatics (ACHI) and the UK Council for Health Informatics Professions (UKCHIP) equivalents. The TIGER Nursing Informatics Competencies are divided into three domains: Basic Computer Competency, Information Literacy, and Clinical Information Management Competencies. The items within each domain were considered in terms of undergraduate/beginner registered nurse practice for their fit with the HiNZ Health Informatics Competencies.

CONCLUSION

While it is useful to consider the applicability of internationally recognized nursing informatics competencies there are NZ context-specific differences that make the automatic adoption of such competencies fraught. We recommend further consideration of nursing informatics competencies for NZ, including how they can be taught among our 17 schools of nursing.

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A LOCAL EXPERIENCE OF HOW TELEHEALTH CHANGED THE ROLE OF RURAL RENAL NURSING

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INTRODUCTION

Our local satellite dialysis units' geographic isolation from the main renal unit increases the vulnerability of their Rural Renal Nurses (RRNs). They also often miss out on education and service development opportunities. Telehealth may help bridge this professional inequality gap.

USE OF TECHNOLOGY AND/OR INFORMATION

Telehealth was slowly introduced since 2014, starting with video clinics; the physician from the hub video linked with patients and nurses at the satellite unit. These RRNs performed patient observations, medications reconciliations, document-filling, fluid assessments and examinations. Gradually, other virtual consultation modalities were introduced: blood result reviews, dialysis rounds, impromptu clinical assessments, patient-family-doctor meetings, dietetics, pre-dialysis counselling and transplant work-ups. The same virtual links were used to facilitate virtual meetings and education sessions with the hub and other satellite units. Patient feedback on the video clinics was obtained.

IMPLEMENTATION/PROCESSES

The smooth implementation of the telehealth projects relied on highly skilled senior RRNs (often with extra professional qualifications) with broad expertise: technology, physical assessments skills, disease management, pharmacology and biochemistry. Telehealth provided these nurses with an excellent unique platform for professional development; with up-skilling in both clinical and computer knowledge. The increased clinician interaction with more opportunities for attending education sessions provided invaluable training. Flexible clinician access through video consults also reduced the vulnerability of isolation. The increased chances of attending service development virtual meetings meant better engagement with the central hub. All these came with minimal work schedule disruption and without unnecessary travel, resulting in efficacious use of nursing time. There were also significant cost and time savings with carbon footprint reduction. Patient feedback obtained was excellent.

CONCLUSION

The use of telehealth has expanded the role of our RRNs, reduced their vulnerability to isolation and bridged the gap towards providing equal opportunities for education and service/professional development. This has empowered our RRNs to operate semi-autonomously. Future plans include developing the nurse-practitioner role.

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USING BIG DATA TO FORECAST THE NURSING WORKFORCE

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INTRODUCTION

The purpose of this paper is to show how the Ministry of Health has used five years of annual practising certificate data from over 50,000 nurses to develop a forecasting model for the nursing workforce, and how it can be used for workforce planning and health policies.

USE OF TECHNOLOGY AND/OR INFORMATION

We developed a dynamic model to forecast the nursing workforce in each practice setting. The model tracks changes in individual annual practising certificate data based on age, practice setting and specific entry and exit patterns and assumes the patterns over the last five years will continue for the next ten years. The model also shows the forecast changes against predicted changes in the total population, the population aged 60 plus and the Māori and Pacific populations.

IMPLEMENTATION/PROCESSES

The model forecasted age distribution of nursing workforce by each practice setting for next 10 years. The model forecasts the growth in registered nurse capacity from 54,035 to 56,735 will almost keep pace with population growth. However the growth in Maori nursing capacity will not keep pace with the growth in the Māori population. The model also identifies enrolled nursing and nurses in continuing care of the elderly as vulnerable workforces.

CONCLUSION

The methods used in the model produced more useful details than conventional linear or non-linear forecasting model for policy making process. The national model is also easily scalable to a regional model.

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IMPROVING HEALTH LITERACY AND OUTCOMES UTILISING TELEHEALTH TECHNOLOGY IN THE HOME

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INTRODUCTION

George, a 79-year-old Maori man has poorly controlled heart failure, COPD and hypertension. He was referred by his GP for telehealth monitoring as he had required multiple hospital admissions for heart failure.

USE OF TECHNOLOGY AND/OR INFORMATION

My Health Clinic at Home technology was implemented supported by a telehealth nurse.

IMPLEMENTATION/PROCESSES

As part of the research, George was signed up and issued a small touch screen computer and blue tooth peripheral devices to monitor his BP, weight and oxygen saturation. George contacted our telehealth nurse daily via video conferencing to review his results and how he was feeling. George eventually felt comfortable to tell the telehealth nurse that he had severe constipation and in fact was only eating cornflakes for three meals a day as that was the only thing he felt didn't constipate him. He felt lacking in energy and unable to do many of his past activities. He agreed with the telehealth nurse to add some kiwifruit into his diet and to start at least eating vegetables with the family dinner. He agreed to change his cornflakes brand as the brand he was using had a very high salt content. The telehealth nurse talked to George around hidden sodium in foods and where to look on labels. George started reading labels and has reduced his salt intake. To support George's regular visits to his GP because of unstable weight and breathlessness we sent the GP a report on Georges' vitals prior to his appointment. The GP increased his diuretics and George then managed to maintain his stable goal weight over the next 3-month period.

CONCLUSION

George is now well, eating normal meals with his family, his weight is stable and he monitors this daily. He knows to monitor his salt intake. George is back to gardening and is actively participating in all his old activities and says that he has not felt this well in a long time.

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HEPATOPANCREATICOBILIARY SURGICAL CANCER SERVICE AT CHRISTCHURCH HOSPITAL

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INTRODUCTION

Historically all patients with a HPB (Hepatopancreaticobiliary) cancer diagnosis from the Upper South Island travelled to Christchurch to see a specialist HPB surgeon for assessment and discussion of their treatment options. Living outside of a tertiary centre there can be a considerable impact psychosocially, financially and on employment involved with travelling up to 5 hours to Christchurch for their FSA (First Specialist Appointment) from other regions e.g. Nelson/Wairau and West Coast. Technological advances in radiology combined with a Multidisciplinary (MDM) team approach have enabled clinical decisions and treatment plans to be made remotely. MDM recommendations could include a treatment modality at a tertiary centre. Other outcomes range from further imaging/staging, surgery, Oncology referral through to best supportive care. Final treatment plans are only agreed after discussion with the patient and family. The aim of introducing Telehealth was to find an equitable solution that would address the needs of this patient group.

USE OF TECHNOLOGY AND/OR INFORMATION

The use of Telehealth for virtual appointments identified as a potential solution.

IMPLEMENTATION/PROCESS

- Initiate a pilot with a HPB surgeon using Telehealth equipment in the Oncology department for virtual FSA's (First specialist appointments).
- Engage named health professionals from the secondary centres to facilitate appointments and support the patients locally.
- Undertake a Patient (or a named support person), medical and nursing staff survey after six months to evaluate the initiative.

CONCLUSION

- 1) Improved access and reduced waiting time to see a specialist.
- 2) Reduced financial costs and other psycho social stressors related to being away from the patient's own home.
- 3) A positive patient experience.
- 4) Business plan to purchase vivid solutions software for the surgical unit.
- 5) Implement Telehealth appointments as an accepted standard practice for external patient referrals to the Upper Gastrointestinal and HPB surgical unit.

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THE SUCCESS OF THE UNPLANNED

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INTRODUCTION

Thames Hospital is a small rural hospital with an active Telehealth service linked to Waikato Hospital, which is just over an hour's drive away. There has been a growth of planned Telehealth clinics at Thames Hospital Outpatient Department. The Oncology Department has weekly planned clinics and as a result has been able to take advantage of the equipment for unplanned activity, this case report centers on one such patient experience. Julie, a patient of the Thames Oncology Unit, who has breast cancer and metastatic disease, had an unexpected turn of events. She didn't have any further planned oncology clinic review for a number of weeks.

USE OF TECHNOLOGY AND/OR INFORMATION

This led Julie to a trip to the Emergency Department, with elevated bilirubin and deranged LFT's, having bloods, and a CT scan and then ended up in a Telehealth clinic, having an unplanned Telehealth appointment, receiving her CT scan and blood results and then formulating a plan of care with her Oncologist.

IMPLEMENTATION/PROCESSES

The use of Telehealth in this situation for Julie, and her husband, was a positive experience, even though she received devastating news that her cancer had now progressed and was in the end stages and, apart from comfort cares and symptom management, there were no further interventions to be done. Julie was able to receive her updated diagnosis from her Oncologist, who could also answer the many questions that arose from Julie and her husband and could be answered in a more specific way than that of an ED doctor. A plan of care was also developed and the necessary referrals completed, as well as the prescriptions required to maintain the immediate needs of Julie.

CONCLUSION

The success of this Telehealth clinic enabled technology to enhance Julies experience and improve her patient focused outcome. This experience demonstrates the success of this technology.

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DEVELOPING AN APP FOR CLINICAL OUTCOMES

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INTRODUCTION

The setting was all mental health services in New Zealand. The problem is that clinicians find it hard to rate outcome measurement scores, particularly clinicians working in the community who often don't have easy access to a computer.

USE OF TECHNOLOGY AND/OR INFORMATION

We decided to develop a simple App which would enable clinicians anywhere, anytime to do ratings for outcome measures and then save and format the results in simple infographics. The App enables clinicians to see their caseload in aggregated detail: how many men and women, under sections of mental health Act, level of severity etc.

IMPLEMENTATION/PROCESSES

We implemented on all three App platforms: IOS, android, Microsoft and made the App freely available to all clinicians. The result has been mixed: we have learnt that clinicians are keen to use this technology but that most don't have access to SMART phones at work.

CONCLUSION

Currently we have over 400 people have downloaded the App. We have learnt that implementation is a long term process with new technology following the classic bell curve of early adopters, early majority, late majority and laggards.

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WE'VE ONLY JUST BEGUN TO LIVE: UTILISING INFORMATION TECHNOLOGY TO TRANSFORM INFECTION PREVENTION & CONTROL SERVICES.

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INTRODUCTION

Many healthcare organisations' Infection Prevention & Control (IPC) teams are data rich but information poor. Tied to their desks, manually checking laboratory results and patient charts and entering data, limited time is available to perform mandatory education, auditing and providing advice. Often becoming aware of an infectious inpatient only after the patient has occupied a multi-bed for multiple days, they are commonly the last person to know about potential clusters or outbreaks.

USE OF TECHNOLOGY AND/OR INFORMATION

Dedicated IPC electronic surveillance systems (ESS) import real-time data from primary sources and link data together, to provide information to guide effective decision making and actions. ESS systems are able to perform whole-hospital, continuous surveillance for all-known infectious agents. Systems also provide alerting, patient monitoring, electronic case management, outbreak management and one-step report generation.

IMPLEMENTATION/PROCESSES

In 2012 a dedicated ESS system was implemented by Canterbury District Health Board (CDHB). Initially data imported from only two CDHB systems and was utilised only by the IPC team, but now data arrives from multiple CDHB and West Coast DHB systems and utilisation has expanded, with information used by multiple departments. Patient outcomes are improved through prompt IPC investigation and advice, preventing infection transmission and reducing costs, and the IPC team has been released from manual, office-based tasks. An expansion roadmap, to further extend the system, has been created and is being applied.

CONCLUSION

The ESS has transformed what the CDHB IPC team knows and how they work. Productivity gains have increased staff visibility for patient care, outbreak preparation, quality and safety initiatives including increased surveillance activities, implementation of national programmes (surgical site infections and hand hygiene) and supporting hospital rebuild planning. These all contribute to better outcomes for patients, ultimately the best measure of the efficacy to any hospital innovation.

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