

Enhancing Practice

2022 Conference

*20:20 Vision – Transforming Our Future
Through Person-Centred Practices*

WEDNESDAY 6 – FRIDAY 8 APRIL 2022
SAGE HOTEL WOLLONGONG, NSW AUSTRALIA

#enhancingpractice2022



working together
to develop practice



Session objectives:

- The Welsh origins of the PCI
- The Australian ImPaCt study
- Implications for the future



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board

The Patient Complexity Instrument (PCI)

**Enhancing Practice 2022 Conference
Wollongong, NSW, Australia
April 2022**

Dr Sue Thomas PhD, RN, Queen's Nurse
Primary Care Advanced Nurse Practitioner, Wellspring Medical Centre, Risca, Wales. UK
Primary Care Cluster Lead, Aneurin Bevan University Health Board, Wales. UK
Visiting Fellow, University of South Wales. UK



Hello from Risca in
sunny South
Wales, UK.
I would love to be
in Wollongong with
you today

Jenny Boak is
kindly introducing
this work, which
has led to
collaboration and
further
developments

Background

- Government and Wales' NHS policy-driven shift of health services away from hospital towards community care settings
- Changing health needs within the community-based patient population (said to be complex)
- The Welsh Government's aim for *"nurses to be able to assess the risk of patients' deterioration"*, and the levels of acuity for community-based patients
- Acuity is defined as "the level of 'severity' of an illness/situation" AND "the measurement of the (intensity of) nursing care required by a patient"
- The investigation addressed district (community) nursing assessment of acuity for community-based patients with complex needs.
- To develop and validate an instrument to identify and measure complex need (or patient complexity) for community-based patients

The literature indicates that:

- District (community) nurses (DNs) adopt a holistic (or generalist) approach to patient care & support
- Little contemporary research has been undertaken to understand holistic DN assessment
- Multiple, complex factors can interplay to affect care for community-based patients
- Understanding and measuring complex patient need, or patient complexity, has important implications for many aspects of community-based services
- Complexity theory supports a proposition that linearity and predictability are incongruous in the context of a community-based patient's life and home situation
- Complexity theory offers a suitable framework to explore the health needs of community-based patients



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board

This was an emergent, exploratory, sequential,
mixed-methods research study ...

... to develop and validate a clinical instrument
used by district (community) nurses to assess
patient complexity

Stages of development and validation of a clinical instrument used by district (community) nurses to assess patient complexity

Instrument Development Stages	Method	Approach
1. Theory and concept building	Group Concept Mapping	Qualitative Conceptualisation, generating visual maps of qualitative data
2. Items development		Quantitative Statistical tests, including similarity matrix analysis, multidimensional scaling, hierarchical cluster analysis
3. Scale development		
4. Psychometric Testing	Rasch Analysis	Quantitative Item Response Theory approach, using statistical testing



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board

A definition of community-based patient complexity from a DN perspective (Thomas, 2017)

The interaction of factors in a patient's life,
including biological, psychological, social,
environmental and support systems, which
requires a shift in an expectation of
predictable outcomes.

Date _____ Patient Name _____ I.D. _____

THE COMMUNITY-BASED PATIENT COMPLEXITY INSTRUMENT (V.1)						
Score each column	Engagement	Clinical	Social Contact	Family and Carer	Resources	Safety
5	This patient lacks capacity Or does not agree to engage in a shared care plan	This patient requires constant supervision and immediate access to nurse intervention to avoid harm or sustain life	This patient is isolated & vulnerable to immediate risk or harm	The carer or family is isolated & vulnerable to immediate risk or harm Or there is no carer	Imminent crisis or failure to progress care plan, care plan in dispute Or resources not available	Patient safety is unachievable by remaining in this environment
4	This patient has fluctuating capacity Or chooses not to engage in some aspects of a care plan	This patient has changeable needs and requires nurse supervision within a comprehensive plan of care	This patient has very limited family support, social connection or activities	There is carer or family strain	Urgent referral (same day) to any multi-disciplinary/sector/agency team or member, or specialist service	Patient safety is unpredictable by remaining in this environment
3	This patient has capacity but there is some patient difficulty with engaging in a shared care plan	This patient has established on-going need and requires scheduled nursing team interventions	This patient has support, social contact or activities available within informal family or community	Carer or family coping strategies are in place, including patient's dependents	Referral for any aspect of a multi-disciplinary/sector/agency team or member	Environmental or other factors present difficulties for patient, carer or nurse which might impact on patient safety
2	This patient has capacity and agrees to engage with a suggested shared care plan	This patient has stable or predictable need and requires some nursing team intervention and support	This patient has regular family or social contact and support for daily activities	The carer or family has regular family or social contact and support	On-going nursing assessment, intervention & care planning	Minor factors from within the home or the external environment present easily manageable risks to patient safety
1	There is full patient-led engagement with shared care plan	This patient is self-caring and requires minimal nursing team support	This patient is fully independent Or well supported by family or community	The carer or family is fully independent and requires minimal support Or there is no need for carer support	Task-oriented, delegated nursing team care and support	There is no identifiable environmental or other apparent risk to the patient

TOTAL SCORE _____

Jennifer Boak

Improving quality of care
through nurses' assessment
of complexity in older
people receiving
community-based care: The
ImPaCt project



The ImPaCt Study

Research and practice gap

- Inconsistent approach to holistic detection of older patient complexity
- Most of literature focuses on nurse's workload rather than the older person's complexity

Research aim:

- To determine whether the PCI in addition to usual care enhances nurses' skill in detecting complexity and appropriate allocation of care for community dwelling patients aged 65 and over

The ImPaCt Study



Protocol

Improving Detection of Client Complexity in the Community (Impact): A Study Protocol of a Pragmatic Randomized Controlled Trial

Jennifer Boak ^{1,*}, Irene Blackberry ² and Tshepo Rasekaba ²

¹ Community Nursing Services, Bendigo Health, Kennington, VIC 3550, Australia

² John Richards Centre for Rural Ageing Research, La Trobe University, Wodonga, VIC 3689, Australia; i.blackberry@latrobe.edu.au (I.B.); t.rasekaba@latrobe.edu.au (T.R.)

* Correspondence: jboak@bendigohealth.org.au; Tel.: +61-03-5454-8081

Abstract: Background: Community-dwelling older clients are becoming increasingly complex. Detecting this complexity in clinical practice is limited, with greater reliance on community nurses' clinical judgment and skills. The lack of a consistent approach to complexity impacts the level of care and support for older clients to remain in their homes for longer. Objective: To examine the effectiveness of the Patient Complexity Instrument (PCI) in addition to nurses' clinical judgment to enhance detection of complexity, and subsequent older clients' resource allocation compared to usual nursing assessment. Design: A pragmatic randomized controlled trial will be conducted within a community nursing service in regional Victoria, Australia. Clients 65 years and over referred to the service who are eligible for Commonwealth Home Support Programme (CHSP) funding will be randomized into Control group: usual nursing assessment or Intervention group: usual nursing assessment plus the PCI. Nurse participants are Registered Nurses currently employed in the community nursing service. Results: This study will explore whether introducing the PCI in a community nursing service enhances detection of complexity and client care resource allocation compared to nurses' clinical judgment based on usual nursing assessment. Conclusion: This protocol outlines the study to enhance the detection of complexity by nurses delivering care for community-dwelling older people in the regional Australian context. The findings will inform the use of a standardized tool to detect complexity among community-dwelling older Australians.

Keywords: home nursing; aged; assessment; health care needs



Citation: Boak, J.; Blackberry, I.; Rasekaba, T. Improving Detection of Client Complexity in the Community (Impact): A Study Protocol of a Pragmatic Randomized Controlled Trial. *Methods Protoc.* **2021**, *4*, 70. <https://doi.org/10.3390/mps4040070>

Academic Editor: Philip Hubitz

Received: 5 September 2021

Accepted: 29 September 2021

Published: 6 October 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

1.1. Global Ageing Population and the Implications

Countries around the world, including Australia, are faced with an increasing ageing population. Trending indicates that by 2050, “one person in every five will be over 60 years of age or older” [1]. This demographic shift impacts on the number of people needing support to remain at home. As people age, if their choice is to stay at home, many will require more support. Their needs may increase with varying degrees of complexity depending on their ailments, social situation, access to resources and safety of their environment [2]. Therefore, along with the increasing number of people needing support, their care needs are more complex.

As new models for chronic conditions and post-discharge care options increase, people are not staying in hospital for as long [3–6]. People are being discharged with a higher level of care required, with a consequence of increasing complexity of the community-dwelling older people [7–10] and increased reliance on caregivers for support [11]. Huber et al. recognized that the increasing prevalence of multimorbidity is also impacting care in the community [10]. The flow-on effect is increasing workload pressure on the community

Outcomes part 1

- The primary outcome of this study was to examine whether the addition of the PCI to usual assessment enhanced detection of patient complexity rating.
- The first secondary outcome was to explore the clinical-care allocated as a result of the rating of complexity. Nursing care included medication support, wound care, referrals and liaison, hygiene, or other.
- The second secondary outcome was the time in minutes allocated to clinical-care based on the rating of complexity.

Outcomes part 2

- How do nurses and allied health professionals in regional communities detect and manage complexity currently?
- How can the PCI be implemented to support assessment of complex older people living in the community?

Outcomes part 2

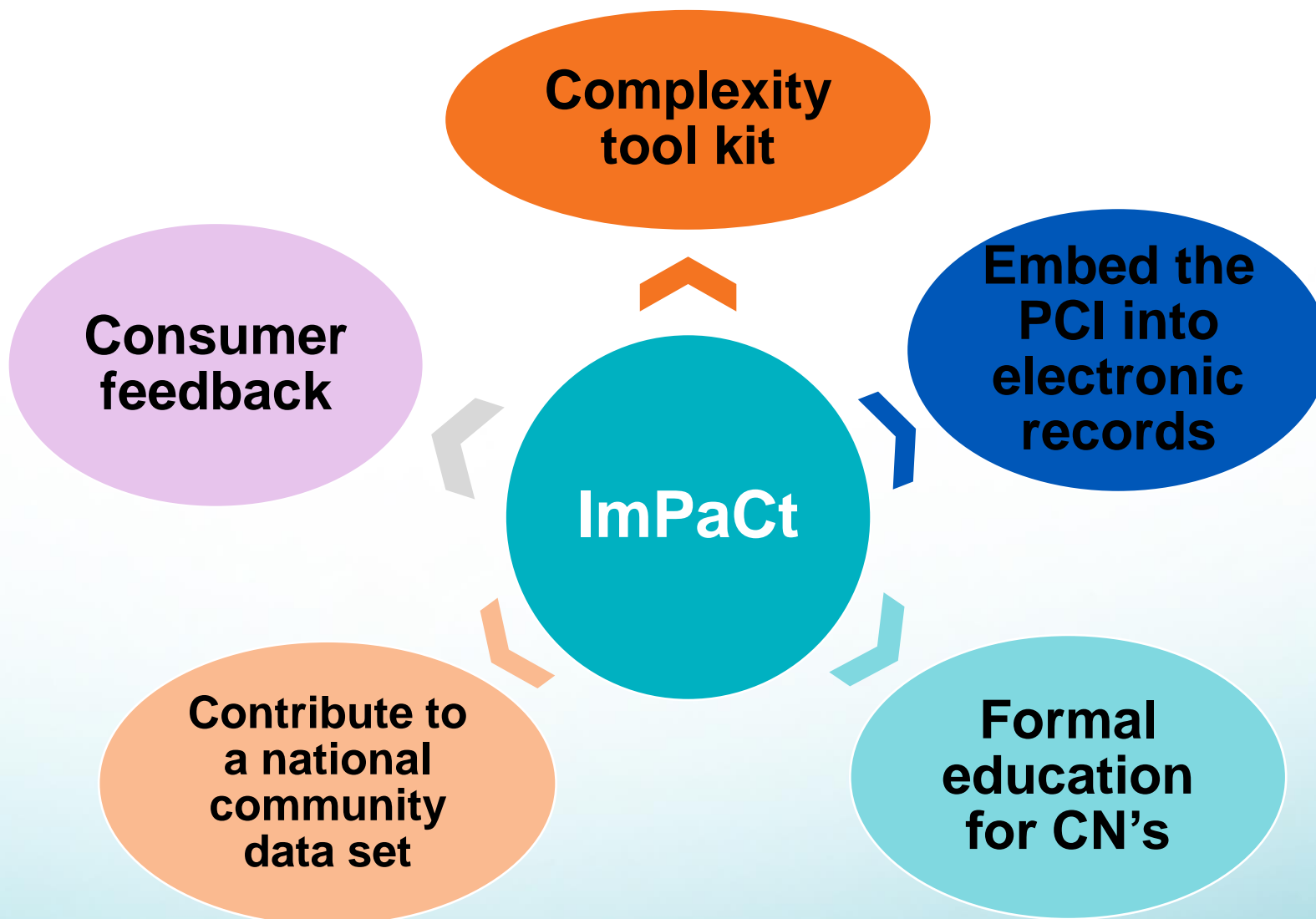


Outcomes part 2

**Use the PCI to
engage the
older person**

**Communicating
across the
healthcare
team**

**A clinical
Decision
Support tool**



Implications for the future



Dr Susan Thomas
Susan.thomas30@wales.nhs.uk



Thank you



Jennifer Boak
jboak@bendigohealth.org.au

www.enhancingpractice.com.au
#enhancingpractice2022



iPDc

working together
to develop practice

