

The utility of the Gold Standards Framework Prognostic Indicator Guideline[®] to Identify Patients Requiring a Palliative Approach to Care in Complex Continuing Care and Long Term Care

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Background

- Older adults are living longer with symptoms associated with both malignant and non-malignant terminal illnesses.^{1, 2} Understanding the burden of illness and the disease trajectory allows for the planning of patients' care needs.^{3, 4}
- Advanced Care Planning (ACP) and Goals of Care (GoC) discussions, symptom control, and preparation for end of life improve patient outcomes and decrease likelihood of invasive interventions at end of life.^{5, 6, 7}
- Understanding illness trajectory and burden of illness is important to ACP and GoC discussions as well as to the identification for the need to implement a palliative approach to care.⁸
- Baycrest Health Sciences is a geriatric care centre with complex continuing care units caring for patients who are too complex to be cared for in the home setting or in long term care (LTC). LTC is a nursing home providing residential and nursing care to people who need assistance with their activities of daily living.

Purpose

To implement the Gold Standards Framework Prognostic Indicator Guideline[®] to increase the clinical team's awareness of patients and residents approaching the end of life and with burden symptoms who would benefit from a palliative approach to care.

Methods

- The Gold Standards Framework Prognostic Indicator Guideline[®] (GSF-PIG[®])⁹ and the Palliative Performance Scale (PPS) were introduced by a palliative care physician to the interdisciplinary health care teams working on 3 complex continuing care (CCC) units and 1 long term care (LTC) unit at Baycrest Health Sciences, a geriatric care centre in Toronto, Canada.
- Between July and August 2014, the GSF-PIG[®] and the PPS were integrated, with the assistance of the palliative care physician into the interdisciplinary rounds which occurred weekly on these units.
- The format of the GSF-PIG[®] was modified to a checklist template for ease of use during rounds. The Surprise Question was put at the end of the tool instead of the beginning after feedback was received by the teams expressing that the answer to this question was clearer after the general indicators of decline and specific illness indicators were reviewed.
- Of the 83 patients admitted to these 4 units, a total of 40 patients were randomly assessed.
- Chart reviews of the electronic medical records were conducted on the patients reviewed with the GSF-PIG[®] and the PPS both during the study period and 4 months after.
- Clinical staff completed a paper questionnaire evaluating the GSF-PIG[®] tool and an on-line survey about the challenges of care discussions.
- Descriptive statistics were used to characterize the patient sample. Data analysis included both qualitative and quantitative methods.
- The study was approved by the Research Ethics Board at Baycrest Health Sciences.

Patient Characteristics (N = 40)		Functional Status	
Demographics		Mobility:	
Age: M (± SD)	80.7 (± 11.4)		
Sex:		Only bed	6 (40.0%)
Male	19 (47.5%)	Mostly bed	5 (40.0%)
Female	21 (52.5%)	Mostly chair	18 (45.0%)
Marital Status:		Walking	11 (27.5%)
Single	6 (15.0%)		
Widowed	11 (27.5%)		
Divorced	7 (17.5%)		
Married	16 (40.0%)		

Gold Standards Framework Prognostic Indicator Guideline[®]

The GSF-PIG[®] is a screening tool that helps the health care teams identify patients who have significant burden of illness and who are likely in the last year of their life.

The GSF-PIG[®] focuses on 3 factors:

- General indicators of decline including the Palliative Performance Scale (PPS) as the performance measure.
- Indicators of decline related to specific illnesses (CHF, COPD, dementia etc.)
- The "Surprise Question" which calls on the clinical team to determine if they would be surprised if the person died within the next 12 months.

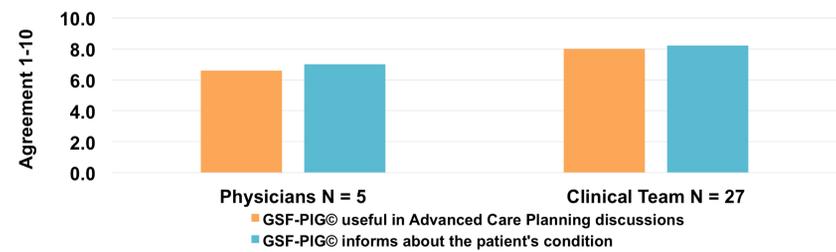
Section One of the Gold Standards Framework Prognostic Indicator Guideline[®]

1. General Indicators of Decline:

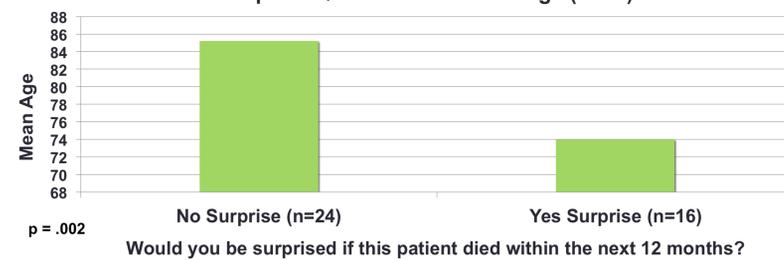
- General physical decline and increasing need for support
 - Advanced disease - unstable, deteriorating complex symptom burden
 - Decreasing response to treatments, decreasing reversibility
 - Choice of no further active treatment
 - Progressive weight loss (>10%) in past six months
 - Repeated unplanned transfers to hospital or significant intercurrent illness requiring IV antibiotics and frequent monitoring.
 - Serum albumen <25g/l
- Please indicate patient's PPS Score _____

Findings

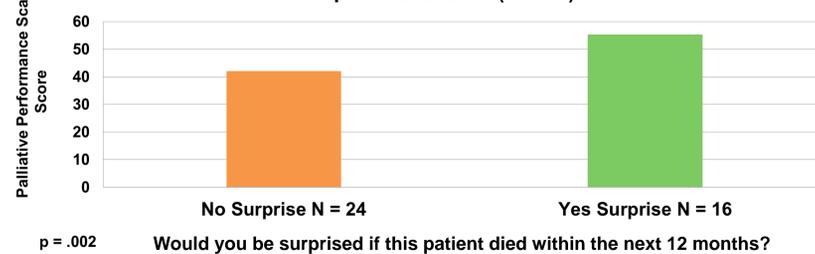
Evaluation of The Gold Standards Framework Prognostic Indicator Guideline[®]



Gold Standards Framework Prognostic Indicator Guideline[®] Surprise Question with Mean Age (n=40)



Mean Palliative Performance Scale Score for the Gold Standards Framework Prognostic Indicator Guideline[®] Surprise Question (N = 40)



Number of Patients Living and Deceased 4 Months Post the Gold Standards Framework Prognostic Indicator Guideline[®] (N = 40)

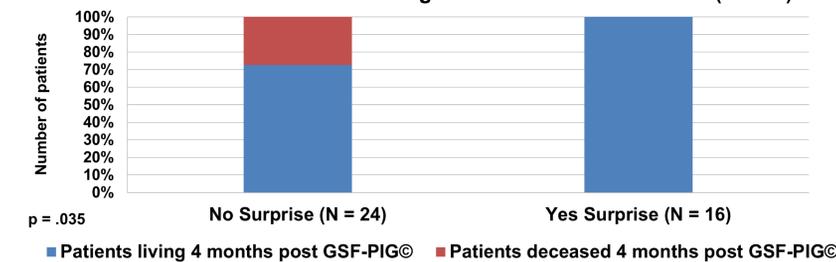
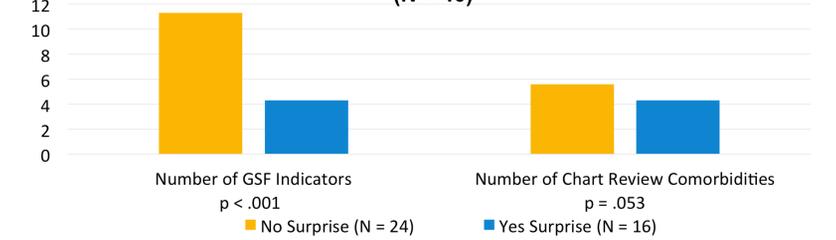


Chart Review Comorbidities and Gold Standards Framework Indicators for the Gold Standards Framework[®] Surprise Question (N = 40)



Acknowledgements: Shane Kopman, Rachel Leboff, Cindy Tran

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Implementing Goals of Care Discussions and the Gold Standards Framework Prognostic Indicator Guideline[®]

Pre-Implementation GSF-PIG [®]	Post Evaluation GSF-PIG [®]
"Inadequate understanding of the patients' condition."	"This tool does help increase the awareness of palliative care goals for patients on our unit."
"Families do not fully understand or are in denial of patients' condition."	"[The GSF-PIG [®]] help[s] families who do not believe that their loved ones would benefit from a palliative care approach - that they feel they will/should improve."
"Not being involved in ACP discussions makes it difficult to discuss ACP with patients."	"The tool helped confirm what the team's perceptions already were."
"More discussion, being better informed, having other staff present as a team."	"I think it's an excellent tool and the team has found it useful."
"A framework/process for when we start the discussion."	

Evaluation of the Gold Standards Framework Prognostic Indicator Guideline[®] (N = 26) (Scale: 1 - Not at all to 5 - Very Much)

Question	Total Number	Mean (Standard Deviation)
The Gold Standards Framework [®] tool is easy to use.	25	4.0 (± 0.9)
Do you feel you had enough information about your patient to complete the screening tool?	25	4.4 (± 0.6)
Is this tool helpful in flagging patients who require symptom approach care in conjunction with acute care?	26	4.0 (± 1.0)
Is the tool useful in communicating to other team members whether a patient has palliative care needs?	24	4.0 (± 1.0)
Do you feel the Gold Standards Framework tool helped initiate care plans to address patients with end of life care needs?	25	3.8 (± 1.2)

Discussion

- Patients identified by the Surprise Question as expected to die within a year, were older, had more indicators of decline, and more comorbidities.
- Patients in whom the team would not be surprised if they died within 1 year had a mean Palliative Performance Scale (PPS) score of 40 and below (Clinical Frailty Scale = 6)¹¹ i.e. were more bedridden, were less likely to complete 1/3 of their meals, and were more confused/ lethargic.
- Using the GSF-PIG[®] 60% of the patients were identified by the Surprise Question as expected to die within the next 12 months.
- 25% of the patients who were identified by the Surprise Question as expected to die within the next 12 months in fact died within 4 months of completing the study.

The study demonstrated the GSF-PIG[®]:

- is a useful tool to integrate into clinical practice
- informed an understanding of whether the patient was in his/her last year of life
- helps health care teams identify patients with higher symptom burden and who are approaching end of life
- is easy to use and enhances communication between members of the health care team regarding the assessment of a patient's symptom burden

Conclusion

- The tool can be easily implemented by care teams in complex continuing care and long term care to assist in discussions concerning patients' burden of illness and likelihood of dying within one year
- This study supports findings in the literature that the GSF-PIG[®] increases interdisciplinary collaboration and increases awareness of end of life care.¹²

Limitations:

- Team meetings were assisted by someone from the research team, which makes it difficult to generalize to an untrained team
- Chart review was four months after completion of the study because some of the patients included in the study were on the slow stream rehabilitation unit and the alternate level of care unit (awaiting long term care). These patients would be discharged from Baycrest Health Sciences and therefore would be lost to follow up at the one year mark.

Future Steps:

- Train teams to use the tool independently
- Assess changes in practice patterns concerning GoC and ACP discussions with implementation of the tool at weekly rounds
- Conduct one year chart reviews post GSF-PIG[®] to determine accuracy of the Surprise Question

References:

- World Health Organization W. Life expectancy: Life expectancy by WHO region. 2011.
- Sidell NL. Adult adjustment to chronic illness: A review of the literature. Health Soc Work. 1997;22: 5-11.
- Lynn J, Adamson D.M. White Paper: Living Well at the End of Life Adapting Health Care to Serious Chronic Illness in Old Age. RAND 2003. www.rand.org/health
- Murray S A, Kendall M, Boyd K, Sheikh A. Illness trajectories and palliative care. BMJ 2005;330:1007-11
- Gordon M, Baker N. Late-Stage Dementia: Promoting Comfort, Compassion, and Care. iUniverse, 2011.
- Hewett DG, Watson BM, Galois C, Ward M, Leggett BA. Intergroup communication between hospital doctors: Implications for quality of patient care. Soc Sci Med. 2009;69: 1732-1740.
- Temel JS, Greer JA, Muzikansky A, et al. Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer. N Engl J Med. 2010;363: 733-742.
- Murray S, Kendall M, Boyd K, Sheikh A. Illness trajectories and palliative care. BMJ 2005 Apr 30; 330(7498): 1007-1011
- Principles and materials for The Gold Standards Framework[®] K Thomas, the National GSF Centre 2003 - 2012. Used with permission from the National GSF Centre in End of Life Care (see www.goldstandardsframework.org.uk where the copyright licensing policy is available)
- Downing M, Lau F, Lesperance M. Meta-analysis of survival prediction with Palliative Performance Scale. J Palliat Care. 2007; Winter; 23(4):245-52; discussion 252-4.
- Grossman D, Rootenberg M, Perri G, et al. Enhancing Communication in End-of-Life Care: A Clinical Tool Translating Between the Clinical Frailty Scale and the Palliative Performance Scale. JAGS 2014; 62:1562-1567.
- Badger F, Plumridge G, Hewson A, et al. An evaluation of the impact of the Gold Standards Framework on collaboration in end-of-life care in nursing homes: A qualitative and quantitative evaluation International Journal of Nursing Studies49 (2012) 586-595