Goals of care in the Wellington Emergency Department: a clinical audit

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ABSTRACT

AIMS: To determine how often goals of care (GOC) are being discussed with older patients in the emergency department (ED).
METHODS: This clinical audit included 300 presentations of patients aged 80 years and over in the Wellington ED. The timeframe was from 1 July to 17 July 2021. Electronic records were interrogated for GOC discussions.
RESULTS: Most older patients (62%) did not have a GOC discussion in the ED. Of patients over the age of 80 who had a GOC discussion in the emergency department, only 14% of those discussions were initiated by ED clinicians.
CONCLUSIONS: There are no current standards for GOC within the ED and this should be established for further research. Protocols and education regarding facilitating GOC discussions in the ED could be established to improve the frequency of GOC discussions.

New Zealand has an ageing population, where older people are living longer with more medical comorbidities.[1,2] Many older people present to the emergency department (ED) and these presentations can be a sign of deterioration in overall health.[3]

In older persons, curative or otherwise aggressive treatment may not be appropriate as it can significantly reduce quality of life.[4] Recent evidence shows that most older people near end of life do not want life-prolonging measures.[5] Despite this, patients nearing death can receive more aggressive treatment in the ED.[6] Decision making regarding the appropriate treatment options for older people can be informed by shared goals of care (GOC) discussions.

Shared GOC discussions are where clinicians and patients discuss their health, treatment options and patient values. Together, clinicians and patients establish an agreed treatment plan for the current presentation and explore treatment options if they are to deteriorate.[7] The overall aim of this discussion is to ensure the treatment received is medically, ethically and personally appropriate for the individual. Shared GOC discussions improve patient satisfaction, and result in reduced hospitalisation, aggressive interventions and cost to the health system.[8]

Evidence regarding GOC in the ED is limited, and further research is needed in this area.[9] However, GOC discussions could have an important role in the ED. Boarding and access block is a well-documented problem, thus, patients can spend prolonged periods in the ED, including in waiting rooms, corridors and in ramped ambulances.[10] Older patients can deteriorate at any time in the busy department and a GOC discussion could prevent the responding team providing inappropriate care that could cause harm.

Standards

In New Zealand, the Health Quality & Safety Commission publishes the Shared Goals of Care Form to aid GOC discussions. This has been used for several years at Wellington Hospital. This document has treatment goals A, B, C and D (view Appendix) to guide management. GOC A and B aim to prolong life through curative or restorative treatment. These patients would receive consideration of intensive care and medical emergency team (MET) calls. However, patients with GOC A would receive cardiopulmonary resuscitation whereas those in GOC B would not. GOC C aims to improve quality of life by managing symptoms. In these patients, CPR and intensive care are not appropriate; however, they would still be for MET calls. The GOC D treatment goal is comfort while dying where CPR, ICU treatment and MET calls are no longer appropriate.

At Te Whatu Ora Capital and Coast, the shared GOC policy states that all patients (excluding maternity and paediatric patients) must have GOC documented within 24 hours of admission. These are only valid for a single admission and require re-discussion and documentation on subsequent admissions. GOC can change throughout admission depending on the patient condition, and the adjustments need to be documented accordingly.

This policy does not provide specific guidance to the ED setting and there are no clear standards for how often GOC should be discussed within the ED.

This clinical audit determines how often we are discussing GOC with older people in the Wellington ED.

Methods

Data were collected retrospectively and included all presentations of patients over 80 years of age to the Wellington ED. There were no exclusion criteria. We did not exclude patients who re-presented within the same time frame or self-discharged as the aim is to assess whether GOC were being discussed at each presentation.

Te Whatu Ora Capital and Coast uses two electronic health records, Medical App Portal (MAP) for most secondary and tertiary services within the region, and Emergency Department Information System (EDIS) for use within the ED, which automatically uploads notes to MAP once finalised.

The dataset included the first 300 presentations of all eligible patients from July 1 2021. The time frame of these presentations was between 1 July and 17 July. National Health Index numbers (NHIs) for these presentations were retrieved from EDIS. Records on MAP were then interrogated for eligible patients to assess documentation of GOC discussions for their current presentation. Key words such as "GOC", "goals of care", "NFR" or "CPR" were searched, as well as a manual search through the emergency and admitting service electronic notes for a GOC discussion. During the manual search we also identified other phrases that indicated a GOC discussion had taken place such as palliation/palliative cares, comfort-based cares and non-invasive or aggressive treatment.

We collected data regarding ethnicity, gender, agreed GOC treatment option, which service discussed GOC, residential care status, level of function (independence with walking and personal cares), if time was spent time in the corridor and the outcome of the presentation (admission, mortality within 18 months).

We also recorded if patients had more than one major comorbidity, which we defined as: ischemic heart disease (previous myocardial infarction or angina), atrial fibrillation, significant valvular disease, heart failure, cerebrovascular disease (previous transient ischemic accident or stroke), peripheral vascular disease, diabetes, renal failure, chronic obstructive pulmonary disease and active cancer.

If information regarding past medical or functional history was not available for the current admission, information was gathered from other electronic notes including recent clinic letters, admissions or from the patient's online primary care profile.

Results

Demographics

Three hundred presentations of patients over 80 years of age to the Wellington ED were included. The time frame was between 1 July to 17 July 2021. Fifty-seven percent of the patients were female and 43% were male. The majority of the patients had more than one major comorbidity at 87%, over half were not independent with mobility or personal cares at 53%, and a smaller proportion were from a rest home at 11%. The majority of the patients presenting were admitted at 64% and of those admitted most were admitted to a medical specialty at 80%. Almost half (48%) of the patients spent time in the corridor (Table 1).

The majority of these patients were New Zealand European at 83%, whereas Māori made up a small proportion at 2%. A smaller proportion were Asian and Pasifika at 7% and 8% respectively (Table 2).

Goals of care discussions

Of the audited sample of 300 patients over the age of 80, 115 (38%) had GOC discussed and 185 (62%) did not have goals discussed (Figure 1).

Of those discussed, 16 (14%) were discussed by emergency doctors and 99 (86%) were discussed by the referred service.

A higher proportion of those who had GOC discussed were admitted (93%) compared those who did not (46%). Those with GOC discussed also had higher percentages of comorbidities, dependence with personal cares and died within 18 months compared to those who did not.

Ethnicity

Less than half of patients had GOC discussed in each ethnic group except for Māori, of whom 67% had GOC discussed. Pasifika and Asian had the lowest percentage discussed and were similar at 28% and 25% respectively. For New Zealand European, the percentage was higher than Pasifika and Asian at 40% (Figure 1).

Comparison of different levels of care

A high proportion of patients were admitted in those who had GOC assigned as A, B and C at

Table 1: Demographics of older persons aged 80 years and over presenting to the emergency department.

Demographics of presentations	
Gender	129 (43%) males 171 (57%) females
Comorbid	260 (87%)
Rest home	33 (11%)
Dependent	160 (53%)
Outcome	191 (64%) admitted to a speciality 152 (51%) admitted to medical specialities 38 (13%) admitted to surgical specialities 10 (34%) discharged 7 (2%) self-discharged
Corridor	145 (48%)
Died within 18 months	52 (16%)

Table 2: Percentage of older persons aged 80 years and over presenting to the emergency department by ethnicity.

Presentations by ethnicity	
New Zealand European	249 (83%)
Asian	20 (7%)
Pasifika	25 (8%)
Māori	6 (2%)

100%, 89% and 100% respectively. However, only 50% of those with GOC D were admitted.

Those with GOC A had fewer comorbidities at 29% compared to those at other levels of care. Those with GOC B and D had greater proportions of comorbidities at 96% and 100% respectively. Those with GOC C had a more moderate proportion at 61%.

No patients with GOC A were dependent with personal cares. Those at GOC B, C and D had increasingly higher proportions of people dependent with personal cares at 28%, 66% and 83% respectively.

One hundred percent of patients with GOC D died within 18 months, whereas patients with GOC C and B had lower mortality rates at 44% and 42% respectively. Patients with GOC A had a much lower mortality rate at 29%.

Of patients who had GOC discussed, half had GOC B and 38% had GOC C. A small proportion were GOC A at 6% and 5% were GOC D.

Four percent of patients had a GOC discussion documented but did not have a level of care assigned. Similar to the patients with GOC D, this group had a greater proportion of comorbidities at 86% and death within 18 months at 86%. Fifty-seven percent of these patients were admitted. (Table 3.)

Patients who re-presented

Six patients re-presented between 1 July and 17 July 2021. Five of these patients presented twice and one presented three times. Three patients who re-presented did not have GOC discussed at

Figure 1: Percentage of older persons aged 80 years and above who had goals of care discussed in the emergency department by ethnicity.

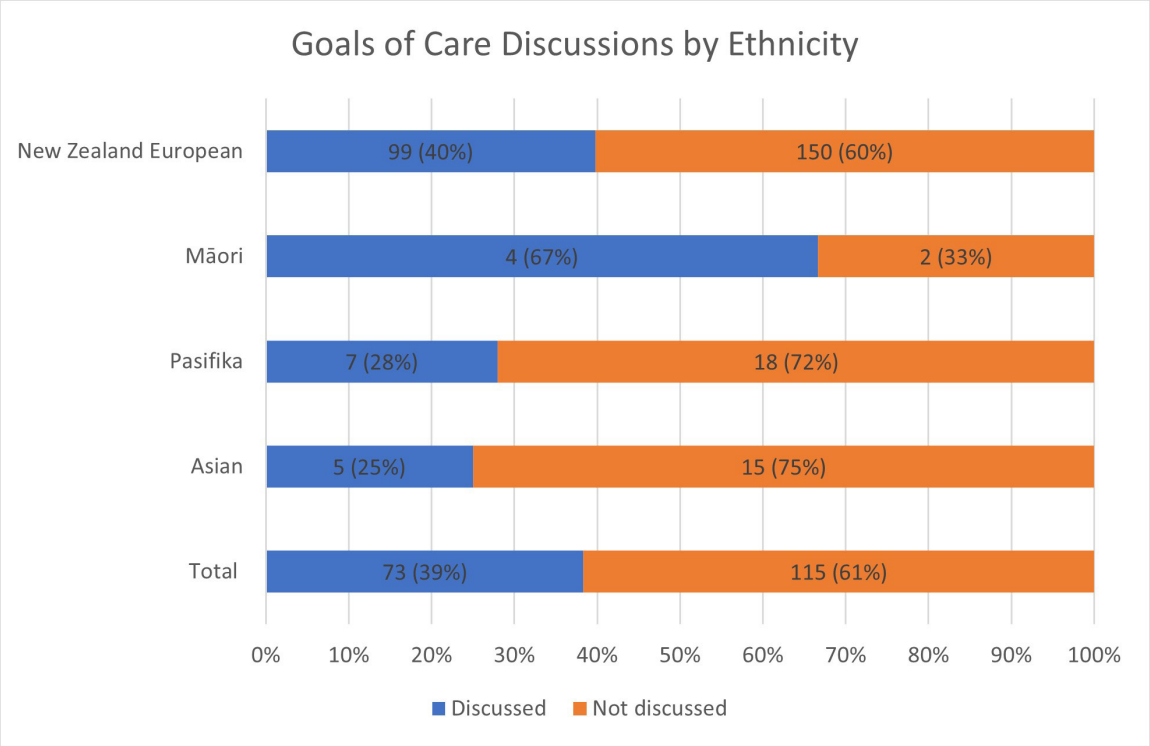

Table 3: Percentage of older persons aged 80 years and above who had goals of care discussed and not discussed by demographics and by level of care.

Comparison of patients with and without goals of care discussions							
Goals of care discussed							**Goals of care not discussed**
	GOC A 7 (6%)	GOC B 57 (50%)	GOC C 38 (33%)	GOC D 6 (5%)	No level 7 (4%)	Total 115 (38%)	185 (62%)
Comorbid	2 (29%)	55 (96%)	23 (61%)	6 (100%)	6 (86%)	109 (95%)	151 (82%)
Dependent with personal cares	0%	16 (28%)	25 (66%)	5 (83%)	4 (57%)	49 (43%)	49 (26%)
Admit	100%	54 (95%)	38 (100%)	3 (50%)	4 (57%)	107 (93%)	85(46%)
Died within 18 months	2 (29%)	24 (42%)	17 (45%)	6 (100%)	6 (86%)	65 (56%)	36(19%)

any encounter and three did. Of those who had GOC discussed, two had GOC discussed on the first encounter and one had GOC discussed on their third encounter. These discussions were carried out by the admitting services.

Discussion

This clinical audit included 300 presentations of patients over 80 years old to the Wellington ED. The time frame was between 1 July and 17 July 2021. GOC were discussed in less than half (38%) of these presentations. Two other recent studies showed similar results. However, these studies involved patients with serious illness and those being transferred to a different facility.[11,12]

Most patients did not have GOC discussions initiated by emergency services but by medical services. This may be driven by the well-established shared GOC protocol and awareness around GOC within the medical specialties. Emergency physicians may be less inclined to initiate GOC before referral due to the busy environment of the ED and due to an expectation that the admitting team should discuss the GOC during the admission process.[13]

Most patients with GOC discussed were admitted. Patients who had GOC discussed had more comorbidities, greater dependence for personal cares and higher rates of death within 18 months. Most of these patients were also made GOC B or below, where cardiac resuscitation and intensive care is not indicated. This may be due to doctors being more inclined to discuss GOC in patients they identify as medically frail and who may deteriorate through an admission. Patients made GOC B or below are likely to be in advanced stages of illness or nearing end of life. The possibility of them passing away sooner is likely to be higher, irrespective of if they get invasive or comfort treatments.

Half of those with GOC D were discharged. These patients may be more likely to have a known terminal illness where the option of palliation through hospice or a care facility may be available and more appropriate than admission.

Ethnicity

There were fewer presentations of Māori over the age of 80 to the ED, at 2% compared to New Zealand European at 83%. This could be due Māori having a lower life expectancy compared to non-Māori and therefore having a younger population with proportionally fewer old people.[14] Discussing GOC in Māori less than 80 years of age may be considered. Most Māori had GOC discussed. Given the small sample size, this result is difficult to interpret as it is likely heavily impacted by chance. However, it is possible that this result could be due to clinicians being more likely to discuss GOC with Māori due to the known inequalities of health in this group.

Barriers to discussing goals of care

These findings may be due to the multiple barriers to facilitating GOC discussions in the ED.

GOC discussions are challenging within the environment of the ED, with the current issues of access block, ramped ambulances and delays in admissions. This creates a busy environment where some clinicians may feel these discussions are not appropriate due to lack of privacy in a corridor, time constraints and prioritisation of time towards more critically ill patients.[13,15]

Emergency physicians have limited information about a patient's health when they are assessed, which can make it difficult to decide if a patient is a candidate for aggressive treatment or not. Advanced directives can help in this decision making; however, these may not be accessible, are out of date or inappropriate. This further adds to the challenge of discussing GOC in the emergency setting where clinicians may feel this may be better done when more information is available and when family are present for these discussions.

Another barrier to initiating GOC in the ED is when there is disagreement between the emergency clinician and the admitting team on the appropriate GOC, which can lead to emergency clinicians not finalising GOC.

Patients may have had GOC previously discussed and clinicians may not feel it is appropriate to rediscuss this with the patient if they feel treatment goals have not changed.

Some patients may not have capacity due to altered cognition from delirium or due to their underlying pathology relating to the current presentation. This could make a shared GOC discussion inappropriate at the time of presentation.

Other barriers to having these discussions can be due to lack of prognostic tools, uncertainty around the trajectory of the patient's condition and lack of therapeutic relationship with the patient.[13,15]

Limitations

A limitation of this audit is that we only accessed electronic documentation of GOC. GOC discussions can be documented in multiple formats, either electronically on the admission or discharge note or directly written on the paper Shared Goals of

Care Form. It is possible that GOC could have been documented in the Shared Goals of Care Form and not put in the electronic admission note. This may lead to underestimation of GOC discussions in the ED. However, the Shared Goals of Care Form is unable to be uploaded electronically, so it is expected that GOC discussion is documented electronically in the ED. There are otherwise no written notes within the ED, and all notes written on discharge summaries and admission notes are entirely electronic where GOC should be documented.

This population was small and predominantly New Zealand European, with small numbers in non-European subgroups. This could make these results influenced by chance and difficult to interpret.

Recommendations

Given the ageing population, GOC discussions for older patients are likely to be a recurrent theme clinically in the ED. GOC needs to be discussed and documented to prevent unnecessary aggressive treatment that could do more harm. Currently, GOC forms are not available electronically. Shared GOC paper forms should be uploaded to electronic health records or these discussions should be recorded electronically in a standard and easily accessible format.

GOC discussions can be ethically and medically complex. These discussions would ideally be done in primary care where the patient is well, there is an ongoing therapeutic relationship and there is adequate time and privacy. Advanced care forms in primary care should be uploaded electronically to the hospital system to ensure accessibility and aid in GOC decision making.

There are no current standards on the frequency of GOC discussion within the ED. The prevalence of these GOC discussions could be improved with the establishment of protocols and further education.

Given the small sample of Māori and Pasifika, a future audit examining shared GOC discussions in these groups should be done in a younger age group or within a region with a higher population of Māori and Pasifika.

Conclusion

Most patients (62%) over the age of 80 presenting to the Wellington ED did not have GOC discussed. Of the patients who had a GOC discussion in the ED, few of these discussions (14%) were initiated by emergency medicine clinicians. Protocols and education regarding facilitating GOC discussions in the ED could be established to improve the frequency of GOC discussions.

CONFLICTS OF INTEREST
No conflicts of interest declared.

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Appendix

Shared goals of care plan

Family Name: _____

Given Name: _____ Gender: _____

AFFIX PATIENT LABEL HERE

Date of Birth: _____ NHI#: _____

Discuss the goal of care for this admission with the person, family, whānau or other (as appropriate). Select the agreed goal of care and document your discussion.

Attempt CPR

A The goal of care is **curative** or **restorative.**

☐ Treatment aims to prolong life.

Attempt CPR: it is clinically recommended and in accordance with the person's known wishes.

Also for referral for ICU level care, MET calls and all appropriate life sustaining treatments.

Additional comments: _____

Do not attempt CPR

B The goal of care is **curative** or **restorative.**

☐ Treatment aims to prolong life and enhance its quality.

Do not attempt CPR: this is likely to cause more harm than benefit or is not desired by the person.

Referral for ICU level care is appropriate ☐ Yes ☐ No

MET calls are appropriate.

Additional comments (e.g. non-invasive ventilation, dialysis): _____

C The goal of care is primarily **improving quality of life.**

☐ Treatment aims to control symptoms, enhance wellbeing and should be easily tolerated.

Do not attempt CPR: this is likely to cause more harm than benefit.

Referral for ICU level care is unlikely to be appropriate.

MET calls are appropriate ☐ Yes ☐ No

Additional comments (e.g. antibiotics, IV fluids, NG feeding): _____

D The goal of care is **comfort whilst dying.**

☐ Treatment aims to alleviate suffering in the last hours or days of life and allow a natural death.

Consider end of life guidelines such as *Te Ara Whakapiri.*

Do not attempt CPR. Referral for ICU level care and MET calls are not appropriate.

Additional comments (e.g. pain management, fluids): _____

This plan has been discussed with the person. If not, record reason overleaf.

Name: _____ Date: / / Time: _____

Designation: _____ Signature: _____

☐ SMO informed, name: _____

This plan is not valid unless signed and dated. Clinically review the person if there are concerns or a change in their condition. Any change to the goal of care requires a new plan and the earlier plan crossed out. Include shared goals of care information in the discharge summary.

Side 1 of 2

HQSC SGOC form v18 Sep 2020

SHARED GOALS OF CARE FORM

Shared goals of care plan

Use this side first to guide the discussion and record key points.

Family Name: _____

Given Name: _____ Gender: _____

AFFIX PATIENT LABEL HERE

Date of Birth: _____ NHI#: _____

Prepare

Consider the person's capacity, their privacy, support people, cultural needs and medical trajectory.

Do they have an:

- Advance Care Plan and/or Advance Directive? ☐Yes ☐No ☐Unknown
- Enduring Power of Attorney (EPA) or legally appointed guardian? ☐Yes ☐No ☐Unknown

If yes, circle either EPA or legal guardian and record their full name:

_____

Seek agreement with the person to have the discussion, with the people they want present.

Full name(s), relationship(s) and role(s) of those present: _____

_____

_____

Discuss

Ask about their understanding of their current condition and what may lie ahead.

Ask how much information they would want to know.

Share your understanding of their current condition and what may lie ahead.

Explore their values and what is important — their priorities, hopes, worries, what helps in tough times and what they would be willing to go through for more time.

_____

_____

_____

_____

_____

_____

_____

Summarise and check for shared understanding.

Recommend and close

Explain your recommendation in plain language, outlining which treatments are more likely to cause benefit than harm.

Reach a decision and document the goal of care overleaf.

Additional comments: _____

_____

_____

_____

_____

☐ Further information in clinical record.

If discussion not held with person, record reason below: _____

_____

_____

_____

_____

Document follow-up plan in the clinical record.

Side 2 of 2

HQSC SGOC form v18 Sep 2020