

The role of GAUs in Comprehensive Geriatric Assessment

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Objectives of Today's Presentation

- Provide an overview of Geriatric Assessment
- Describe the function of a Geriatric Assessment Unit (GAU)
- Present evidence from the literature supporting the efficacy of GAUs

Why is Geriatric Assessment Important?

- As the number of old, and particularly very old people increases in Canada, their impact on the health care system is becoming more apparent.

Why is Geriatric Assessment Important? Some Statistics

- The Southwestern Ontario 75+ population is expected to increase 19.5 % between 1997 and 2003 compared with a 6.8% increase in the population as a whole.
- Furthermore, a *dramatic* increase in the demand for health care is anticipated for the second decade of this century, when the baby boomers enter their senior years.

Why is Geriatric Assessment Important? Some Statistics

- The *frail elderly* represent the fastest growing population of health care consumers.
- Prevalence of frailty in the community ranges from 19- 41 % of those 65 and over, depending on the definition used.
- This group of frail elderly consume approximately 30% of health care resources.

Frail Elderly- Definition

- Older individuals who have multiple, complex, interacting physical and psychological problems that are brought on by the interaction of disease and aging, often with the result of functional impairment and dependency.
- Social factors often compound these problems.

Why is Geriatric Assessment Important?

- When impaired older persons become ill, they are at high risk of *functional deterioration* that can lead to
 - decreased *independence*
 - decreased *quality of life*
 - *institutionalization*
 - increased *mortality*.

Geriatric Assessment

- Comprehensive Geriatric Assessment has assumed a pivotal role in geriatric care:
- Because of the complexity of the frail elderly patient
 - Because of the vast number of unmet needs facing the older population
 - Because comprehensive geriatric assessment and early intervention by an IDT has been shown to affect positive patient outcomes.

Geriatric Assessment- Definition

A multi-dimensional- usually *interdisciplinary diagnostic process*, designed to quantify an elderly individual's medical, psychosocial, and functional capabilities and problems with the intention of arriving at a comprehensive plan for therapy and long term follow-up.

Rubenstein (1987)

Geriatric Assessment- Its Role

- A thorough, comprehensive, interdisciplinary geriatric assessment at the point at which an older person's health and/or function substantially decline may enable older people to return and *remain in the community longer, maintain greater independence, enjoy a higher quality of life, and have greater longevity.*

Historical roots of Geriatric Assessment

- Concept of geriatric assessment traces back to British geriatric pioneers.
- These early geriatricians uncovered a high prevalence of readily identifiable remediable problems in elderly patients.
- They also found that most of these patients showed often *dramatic* improvement when provided with appropriate intervention and therapy.

Geriatric Assessment Units What exactly do they do?

- Provide comprehensive interdisciplinary *assessment of the older person* including addressing medical, functional, and psychosocial issues
- Develop a *comprehensive plan of care* to address the aforementioned issues

**Geriatric Assessment Units-
What exactly do they do?**

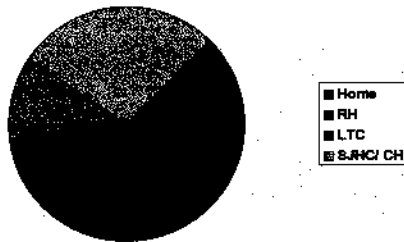
- Provide *short-term, goal oriented medical and therapeutic* intervention to help older persons maintain and improve their locomotor, physical and mental function
- Discharge planning to allow the individual to *maintain the highest level of independence possible*

**Geriatric Assessment Units-
What exactly do they do?**

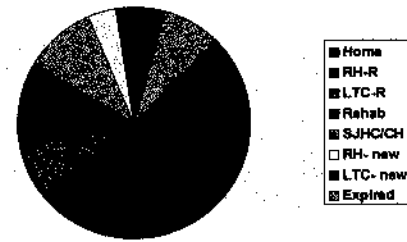
Provide IDT recommendations about:

- *Appropriate community supports* to maintain older persons in their home as long as possible, while reducing the associated strain on their families/ caregivers
- *Interventions to restore or preserve health and independence*

Setting Prior to Admission to SJHC GAU (1999- 2000)



Setting After Admission to SJHC GAU (1999- 2000)



Characteristics of patient appropriate for GAU referral

- Older person (usually 75+years) frail or ill with multiple and complex medical, functional, and psychosocial issues of uncertain etiology with potential for improvement or reversibility.
- Generally, a GAU patient will have several active health issues which require concurrent management.

Characteristics of patient appropriate for GAU referral

- Health issues are of sufficient urgency and complexity that they require inpatient assessment by a specialized IDT with the investigative resources of an acute care hospital.

Characteristics of patient appropriate for GAU referral

Patients with "geriatric presentation" including

- altered mental status/ confusion
- postural instability with falls/ loss of mobility
- incontinence
- polypharmacy
- iatrogenic problems
- social crisis such as caregiver stress

have been shown to benefit significantly from GAU assessment

GAU patients may present with a cluster of some of the following characteristics:

- Presence of complex multi-factorial illness
- Escalating use of community supports
- Polypharmacy
- Multiple interacting chronic pathologies
- Frequent visits to ER/ acute hospital admissions
- Illnesses that present atypically

GAU patients may present with a cluster of some of the following characteristics:

- Potentially reversible functional disabilities requiring a IDT assessment
- Recent unexpected increases in functional dependency
- Potential need for placement
- Need for advice regarding investigation, diagnosis, and management of specific diseases commonly seen in older people.

GAU patients may present with *several* of the following conditions:

- Delirium/ dementia/ depression
- Postural instability/ recurrent falls
- Medication issues including polypharmacy, non-compliance, drug reactions
- Polysomatic complaints
- Unexplained behavioral changes/ sleep disturbances

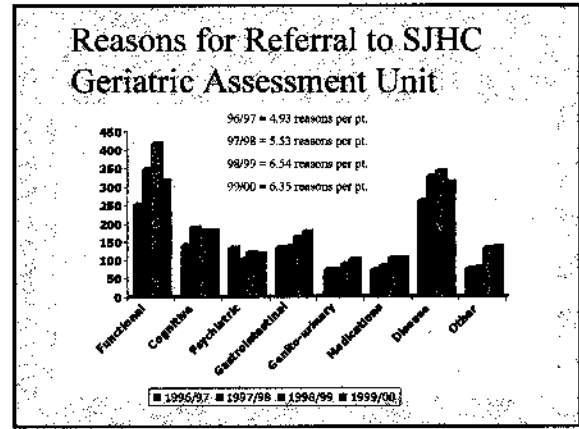
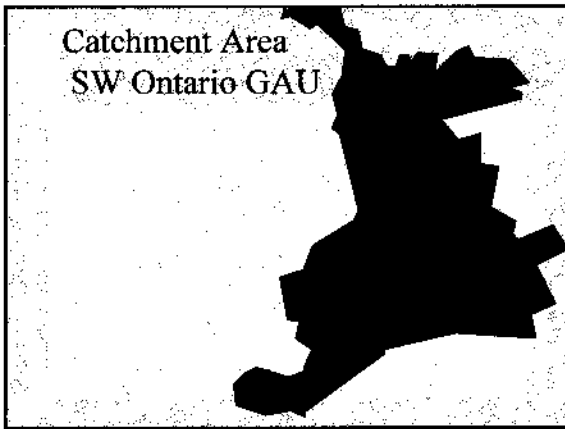
GAU patients may present with *several* of the following conditions:

- Competency determination (mental/ functional)
- Multiple sensory losses
- Incontinence
- Various deficits requiring assessment of rehabilitation potential
- Common concurrent/ acute medical conditions

Optimal Use of a GAU

Requires that:

- Appropriate patients be referred for assessment and treatment.
- Patients be discharged promptly either to their own homes/ local hospitals/ rehabilitation facilities/ LTC etc. once the assessment is complete and the treatment objectives have been met.



Yearly Comparison of SJHC GAU Consultations and Investigations

	1996/1997	1997/1998	1998/1999	1999/2000
Av. # of physician consults/ mo	16	17.3	16.2	20.9
Av. # of non-physician consults/ mo	24	24.5	31.6	27.3
Av. # of investigations/ mo	38.5	48.8	48.2	52.1

Evidence of Positive Impact of GAUs

Growing body of research shows that GAUs can decrease the incidence of

- Inappropriate institutionalization
- Incomplete medical diagnosis
- Lack of coordination of community support services,
- Over use of prescription medications,
- & Under- utilization of rehab services.

Effectiveness of an inpatient geriatric service in a university hospital White et al (1994)

GAU Assessment can improve outcomes measured by

- decreased laboratory and pharmacy usage
- improved functional status
- discharge to a more independent level of care without increasing length of stay or early readmission after discharge

Effectiveness of an inpatient geriatric service in a university hospital White et al (1994)

These authors concluded an interdisciplinary inpatient geriatric service can improve the functional outcomes of appropriate elderly patients, and can be *cost effective*.

Effectiveness of a geriatric evaluation unit. A randomized clinical trial.

Rabenstein et al. (1984)

GEU group shown to have

- lower mortality, less likely to initially have been discharged to a NH/ spent time in a NH during follow-up
- less acute-care hospital days, NH days, and acute care hospital readmissions
- more improvement in functional status and morale
- lower direct costs for institutional care

Effectiveness of a geriatric evaluation unit. A randomized clinical trial.

Rabenstein et al. (1984)

These authors concluded that geriatric evaluation units can provide *substantial benefits at minimal cost* for appropriate groups of elderly patients, over and above the benefits of traditional hospital approaches.

A randomized, controlled trial of a geriatric assessment unit in a community rehabilitation hospital

Applegate et al (1990)

Patients in the GAU group had:

- Significantly more functional improvement in 3 of 8 basic self-care activities
- Significantly more patients residing in the community both 6 weeks and 6 months later
- Fewer nursing home stays of 6 months or longer
- A trend toward fewer deaths

A randomized, controlled trial of a geriatric assessment unit in a community rehabilitation hospital

Applegate et al (1990)

The authors concluded that the treatment of selected elderly patients in a specialized GAU improves function, decreases the risk of nursing home placement, and may reduce mortality.

Improvements in Patient Outcomes Derived from GAUs

- Improved diagnostic accuracy
- Improved placement location
- Improved functional status
- Improved affect/ cognition
- Reduced prescribed medications

Improvements in Patient Outcomes Derived from GAUs-continued

- Decreased nursing home use
- Increased use of home health services/ appropriate community services
- Reduced use of acute hospitals
- Reduced medical care costs
- Prolonged survival

Conclusions

- A GAU Assessment can improve the function of the frail elderly patient, reduce acute care costs, decrease institutionalization, and improve utilization of community services in a *cost effective manner*.
- Early accurate assessment, referral to appropriate therapy and support services, and early active IDT discharge planning increase the success of a GAU admission

Conclusions

- It is important to identify which patients can be expected to benefit the most in order to make maximal use of scarce resources
- Patients with primarily a "geriatric presentation" tend to show the most marked improvements from a GAU assessment.
- In general, the higher the level of pre- illness function and the steeper the slope of decline, the better the prognosis for recovery.

Closing Thought

- According to the study by Rubenstein et al (1984), use of a GEU (Geriatric Evaluation Unit) could theoretically *reduce* about **200, 000** nursing home admissions *per year* in the United States.