Why New Thinking is Needed in the Way We Care for the Elderly

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RGPEO Geriatric Refresher Day
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Presentation Objectives

- Provide the context that highlights the disconnects that currently exist.
- Demonstrate how current care delivery paradigms are problematic and require an elder friendly approach.
- Introduce the Acute Care for Elders (ACE) Strategy as a care model that can deliver better patient and system outcomes.

Shifting Mortality Patterns

Causes of Death	Rank in 1900	Rank in 2005				
	All Ages	All Ages	65+	65-75	75-85	85+
Heart Disease	4	1	1	2	1	1
Cancer	8	2	2	1	2	2
Stroke	5	3	3	4	4	3
Chronic Lung Diseases	9	4	4	3	3	5
Alzheimer's Dementia	10	7	5	10	5	4
Diabetes	-	6	7	5	6	7
Influenza/Pneumonia	1	8	6	8	7	6
Nephritis	6	9	8	7	8	8
Accidents	7	5	9	6	9	9
Septicaemia	2	10	10	9	10	10
Diarrhea and Enteritis	3	-	-	-	-	-

Data for 1900 from Lindor and Grove, 1947; Data for 2005 from National Vital Statistics Report, Vol 56, No. 10, April 24, 2008.

Ageing and Hospital Utilization in Central Toronto LHIN

	Number	Age <65	Seniors 65 +	% Seniors 75+
Total Population	**1,142,469**	87%	**13%**	**49%**
Emergency Room Visits	**321,044**	79%	**21%**	**62%**
Acute Hospitalizations	**78,025**	63%	**37%**	**64%**
w/ Alternate Level of Care Days	4,263	17%	**83%**	**76%**
w/ Circulatory Diseases	10,361	32%	**68%**	**65%**
w/ Respiratory Diseases	5,928	43%	**57%**	**73%**
w/ Cancer	6,743	53%	47%	**54%**
w/ Injuries	5,809	58%	42%	**71%**
w/ Mental Health	6,161	87%	13%	**59%**
Inpatient Rehabilitation	**3,368**	25%	**75%**	**66%**

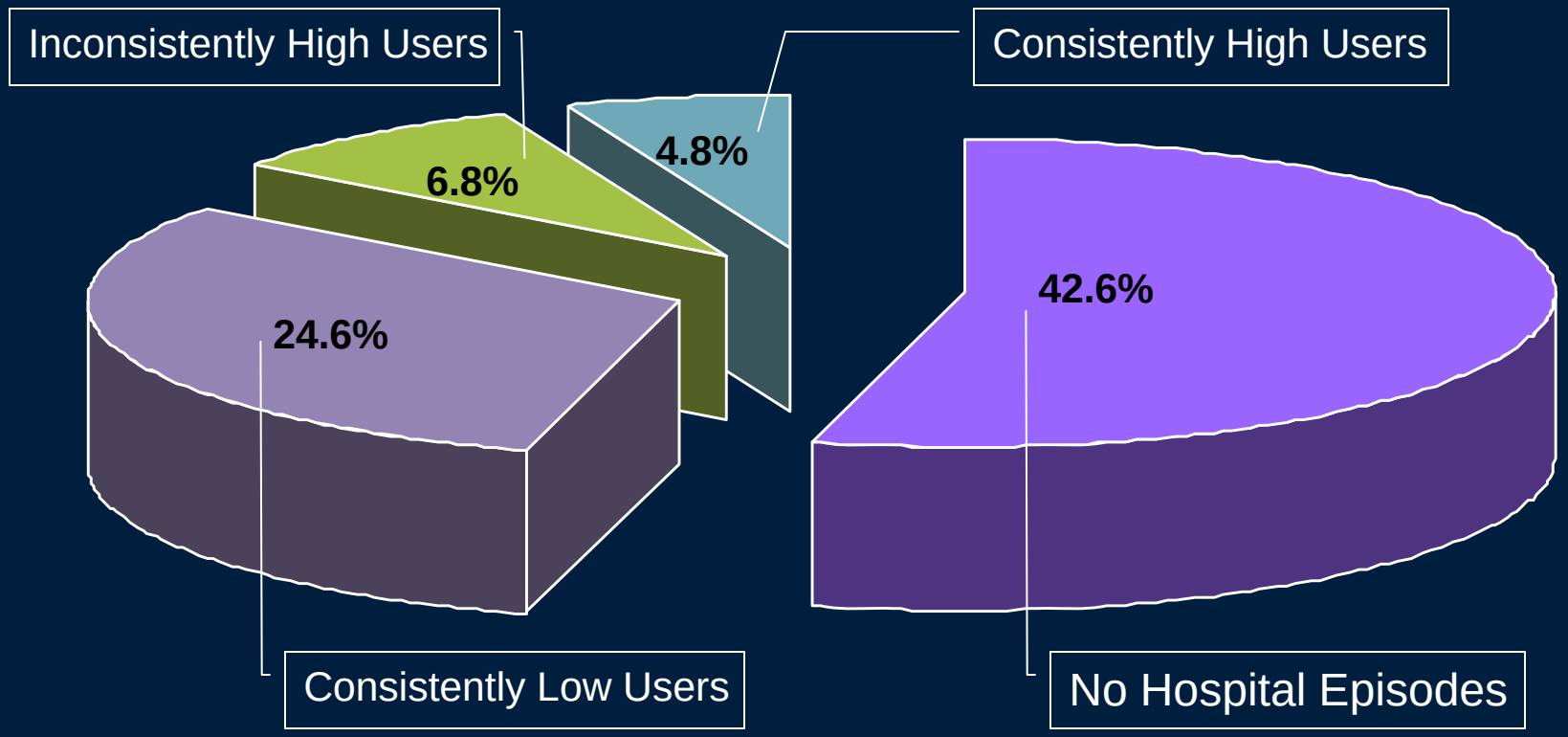
Toronto Central LHIN

Ontario Inpatient Hospitalizations

Age	Discharges	Total LOS Days	ALOS
Population Total	945,089	6,075,270	6.4
Population 65+	370,039 (39%)	3,516,006 (58%)	9.8
65-69	6.9%	7.9%	7.3
70-74	7.7%	9.8%	8.2
75-79	8.5%	12.5%	9.4
80-84	7.9%	13%	10.5
85-89	5.3%	9.4%	11.4
90+	2.8%	5.3%	12.2

Canadian Institutes for Health Information (CIHI)

Ageing and Hospital Utilization in the 70+

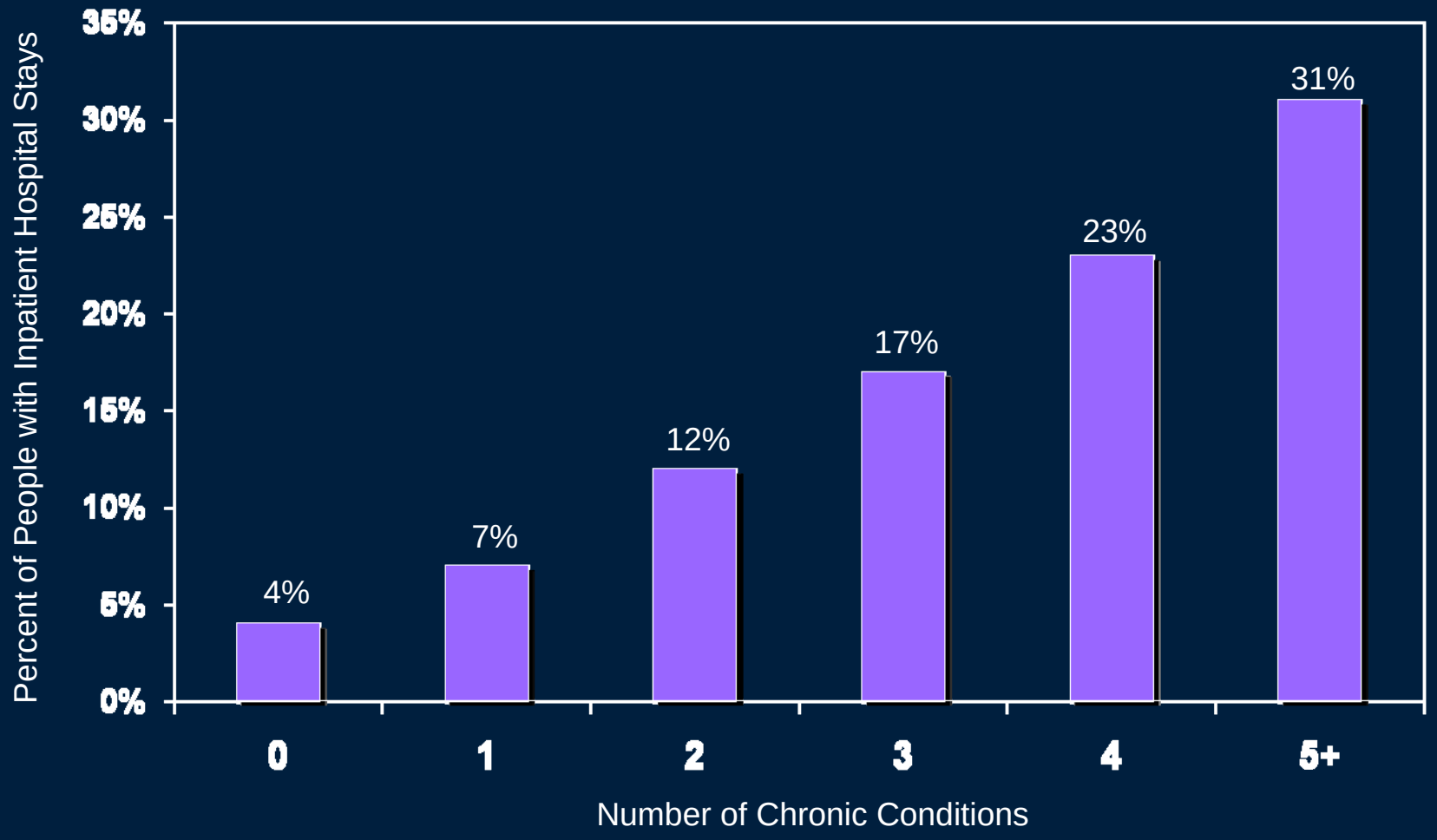


- Only a *small* proportion of older adults are consistently extensive users of hospital services *(Wolinsky, 1995)*

What Defines our Highest Users?

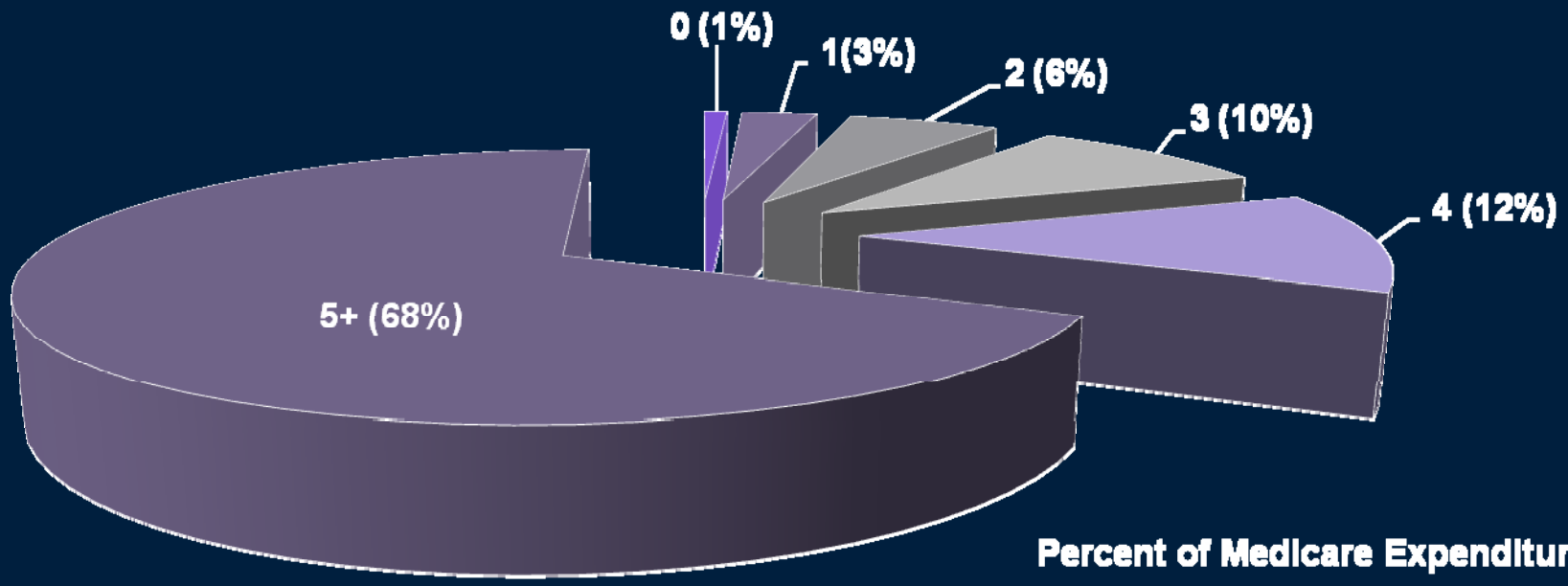
- Polymorbidity
- Functional Impairments
- Social Frailty

Chronic Disease and Hospitalization



Medical Expenditure Panel Survey, 2001

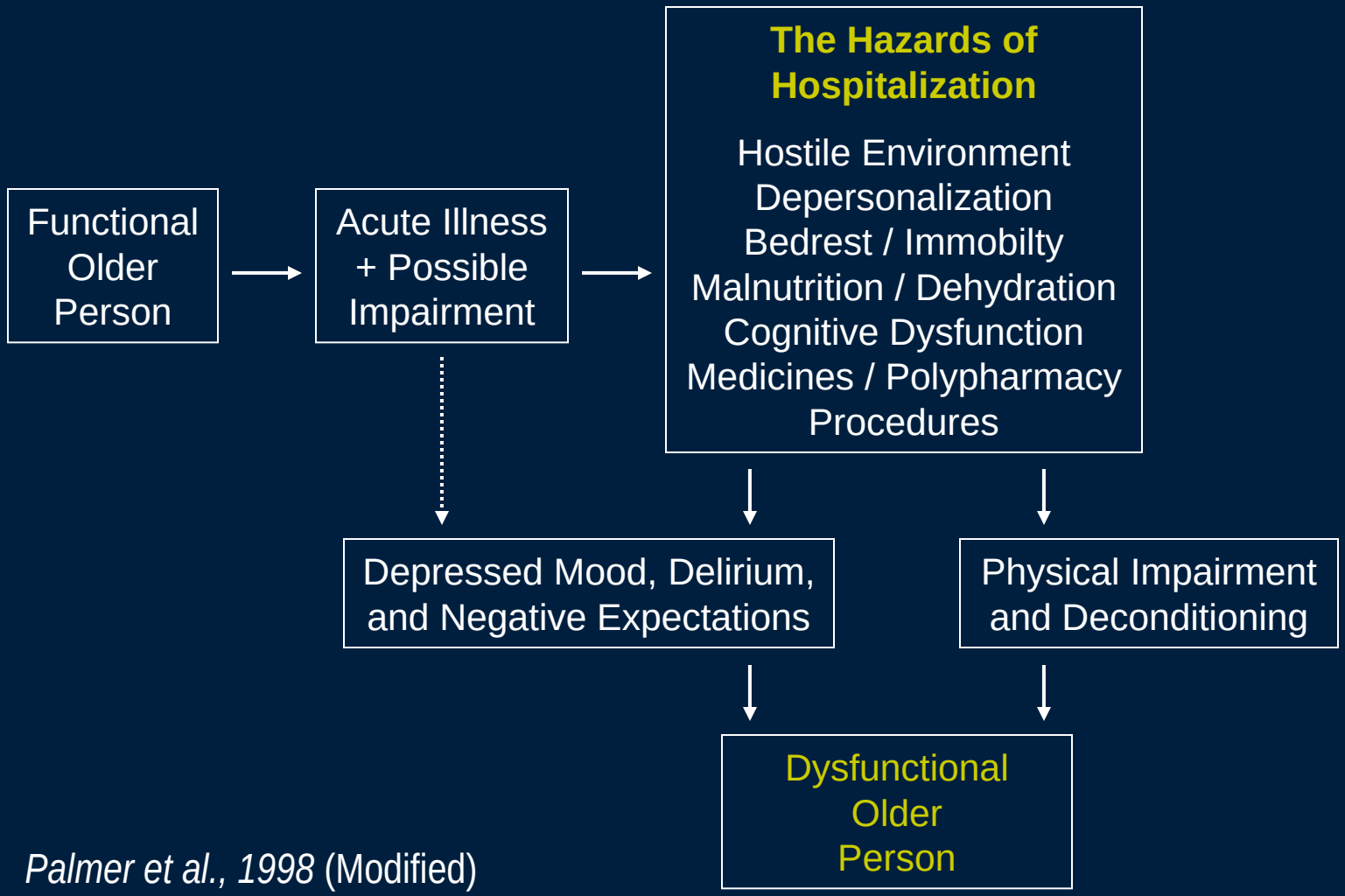
The Cost of Chronic Diseases



80% of Medicare spending goes towards the 20% of its users with **4** or more Chronic Conditions.

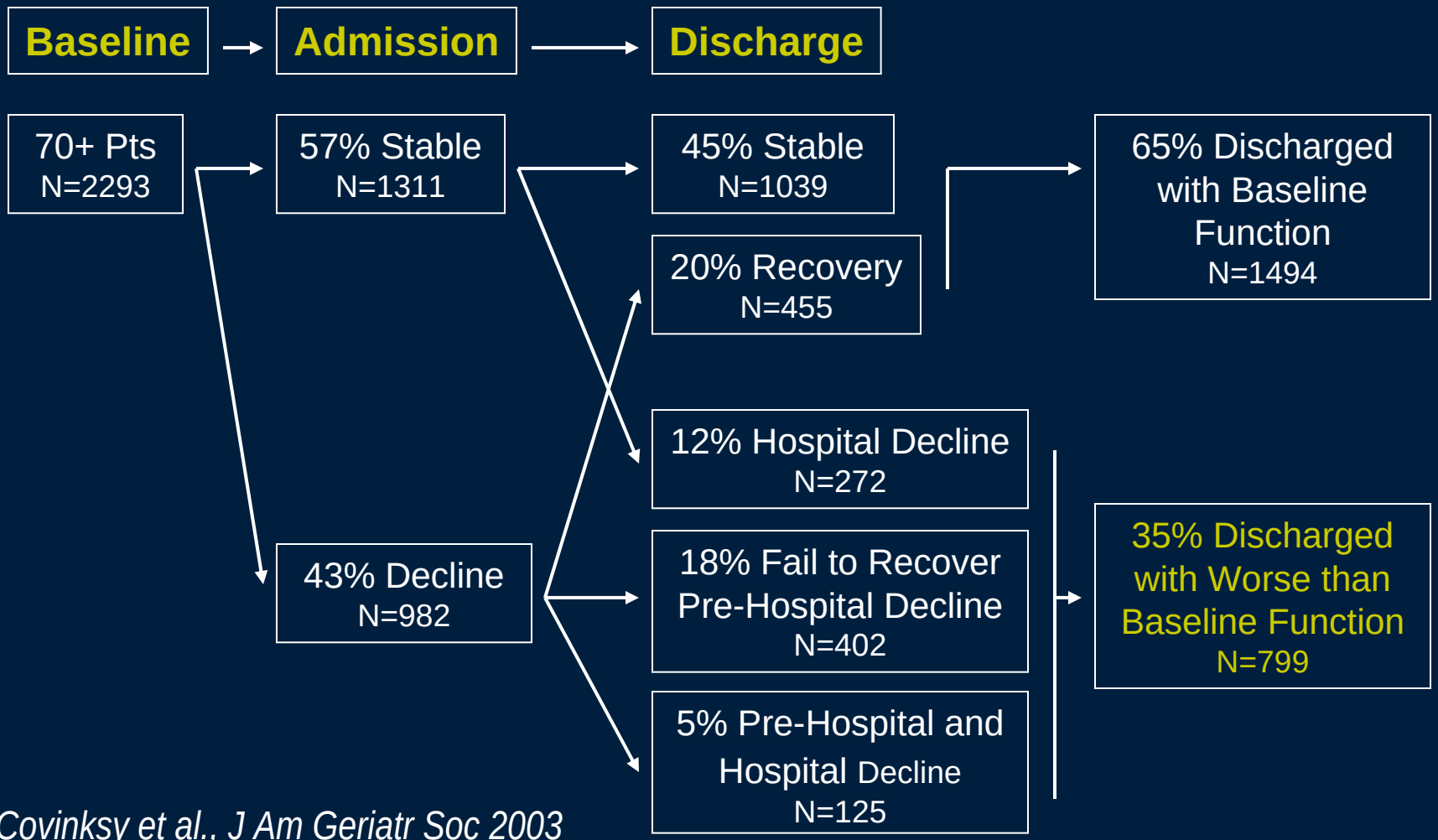
Medicare Standard Analytic File, 2001

Conceptualizing Functional Decline



Palmer et al., 1998 (Modified)

Trajectories of Functional Decline



Covinksy et al., J Am Geriatr Soc 2003

The Hazards of Hospitalization

THE COST OF FUNCTIONAL DECLINE *(Palmer, 1995)*

- The loss of independent functioning during hospitalization has been associated with:
  - Prolonged lengths of hospital stay
  - Increased recidivism
  - A greater risk of institutionalization
  - Higher mortality rates

The Dilemma

The way in which acute hospital services are currently resourced, organised and delivered, often disadvantages older adults with chronic health problems. *(Thorne, 1993)*

Acute Care for Elders (ACE) Strategy

- Redesigns or establishes new sustainable approaches that seek to enhance and improve upon current service models.
- Requires a shift in traditional thinking that currently underpins the administration and culture of most traditional care organizations.
- Is not adverse to identifying risk factors and needs and in intervening early to maintain independence.

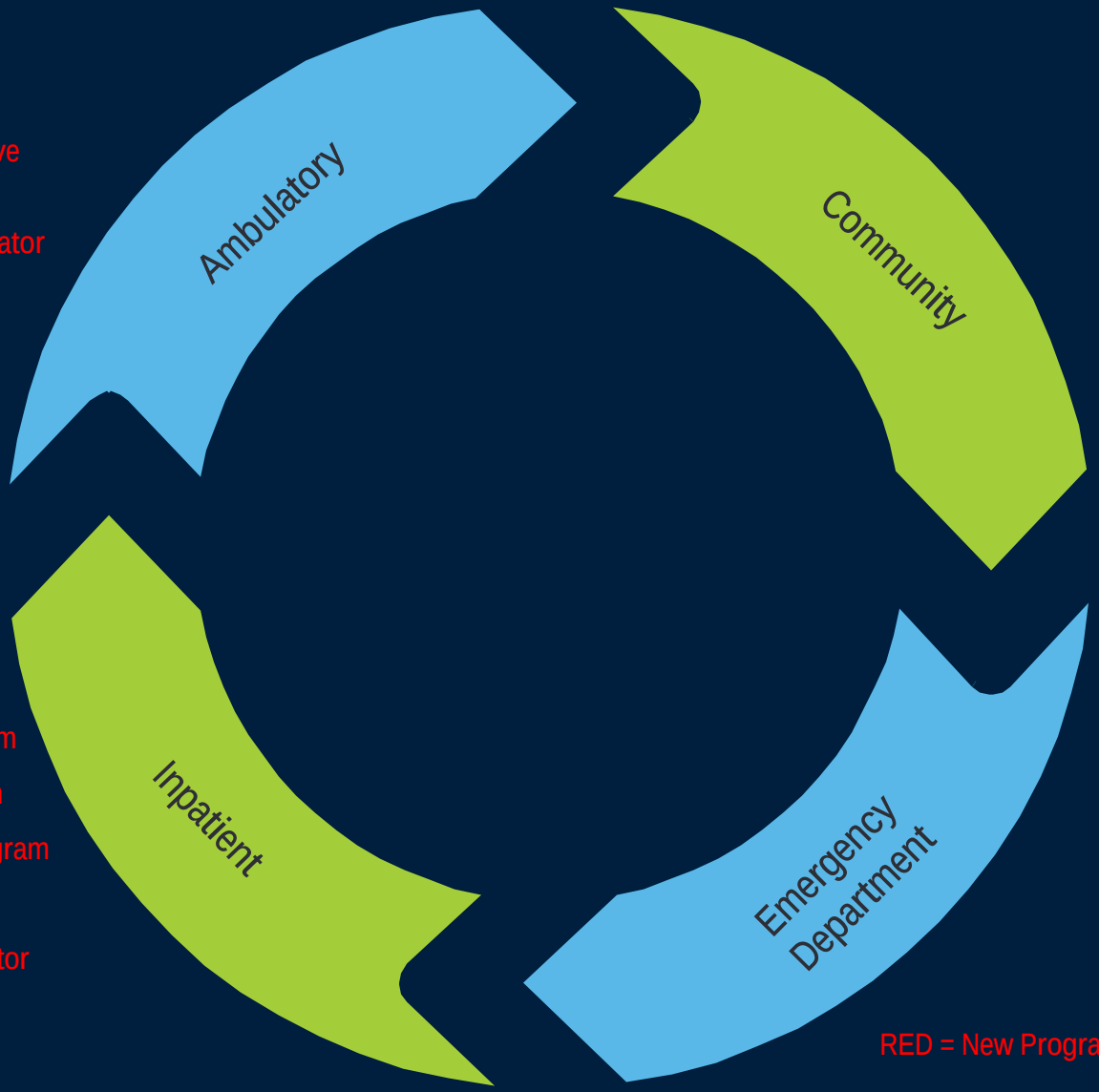
The Elder Friendly Hospital™ Model

- These dimensions work together to minimize functional decline, promote safety, and mitigate adverse social and medical outcomes.

Geriatrics at Mount Sinai

- In 2010, Mount Sinai became the *first* acute care academic health sciences centre in Canada to make Geriatrics a core strategic priority.
- Our ACE Strategy is being operationalized through the implementation of a comprehensive and integrated strategic delivery model that utilizes an interprofessional team-based approach to patient care.
- Our Strength relies on the partnership of our Geriatric Medicine, Geriatric Psychiatry, Primary Care, Palliative Medicine, and Emergency Medicine programs.

The Mount Sinai Geriatrics Continuum



Outpatient Geriatric Medicine, Geriatric Psychiatry and Palliative Medicine Clinics

CCAC – Clinic Coordinator

Home-Based Geriatric Primary/Specialty Care Program: House Calls

Temmy Latner Home-Based Palliative Care Program

CCAC – Integrated Client Care Project (ICCP) Site

Reitman Centre for Alzheimer's Support and Caregiver Training

Community and Staff Education Programs

Geriatric Medicine, Geriatric Psychiatry and Palliative Medicine Consultation Services

Orthogeriatrics Program

ICU Geriatrics Program

MAUVE Volunteer Program

ACE Unit

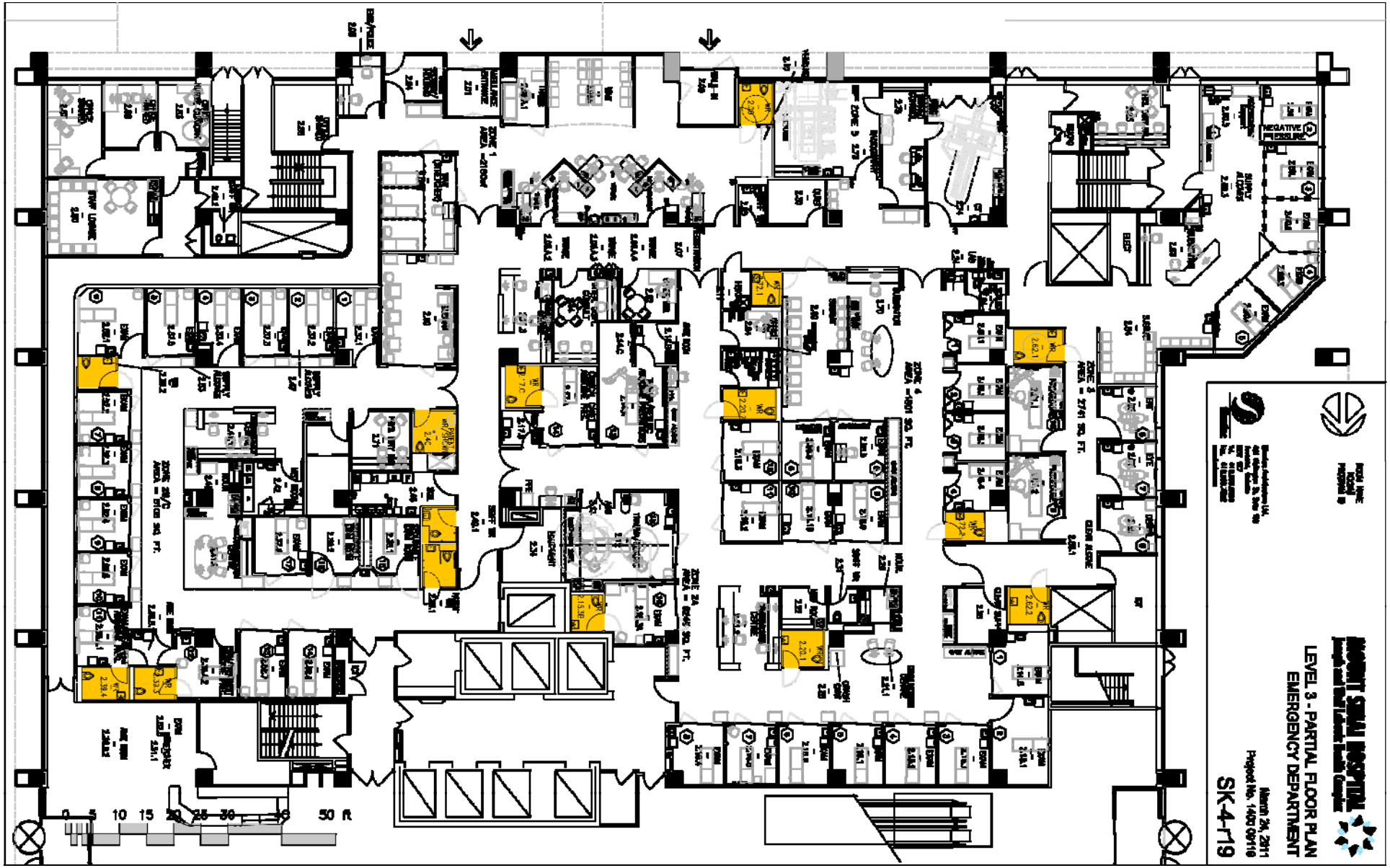
CCAC – ACE Coordinator

ISAR Screening

Geriatric Emergency Management (GEM) Nurses

ED Geriatric Mental Health Program

RED = New Programs Launched in FY 10/11



Enabling Function through Design


ZONE 2A
AREA = 6248 SQ. FT.
ZONE 1
AREA =2180sf
ZONE 2B/C
AREA = 5105 SQ. FT.
WAIT
2.05
REGISTRATION
2.07
TRIAGE
2.06.A.4
TRIAGE
2.06.A.3
TRIAGE
2.06.A.2
TRIAGE
2.06.A.1
ANTE ROOM
2.14.B
TRAUMA/RESUSC AIRBORNE PRECAUTIONS
2.14.A
2.14.C
INTER. DISP'L. CONSULT
2.44
CRITICAL CARE AIRBORNE PREC.
2.17.A
COMMUNICATION CENTRE
2.21.3
WR
2.17.C
ANTE ROOM
2.17.B
TRAUMA/RESUSC
2.12
ABU
2.13
EXAM
2.15.3A
WR
2.15.3B
EQUIPMENT ZONE
EQUIPMENT
2.34
PPE
STAFF WR
2.49.1
AMBULANCE ENTRANCE
2.01
SECURITY/ HOLDING
2.04
WAIT (STRETCHER)
2.08B
SUBWAIT
2.50
PATIENT WR/SHOWER
2.40
SOIL
2.48
PATIENT WR
2.39.1
SECURABLE EXAM ROOM
2.38.1
PHYS. DUTY RM.
2.71
SECURABLE EXAM ROOM
2.38.2
EMS/POLICE
2.03
EXAM
2.37.1
EXAM
2.37.2
EXAM
2.37.3
SUPPLY ALCOVES
2.47
MED ROOM
2.42
EXAM
2.37.6
ICT
EXAM
2.52.8
EXAM
2.52.7
OFFICE SHARED
2.88
EXISTING STAFF WR
2.49.2
EXAM
2.37.4
SUPPLY ALCOVES
2.53
COMMUNICATION CENTRE
2.41.1
NOUR
2.46
TELECOMMUNICATION CENTRE
2.41.2
EXAM/TREATMENT AIRBORNE PREC.
2.36.A.2
OFFICE NURSE CLINICIAN
2.83
EXAM
2.37.5
WR
2.39.2
ANTE ROOM
2.36.B
WR
2.39.3
EXAM - STRETCHER
2.52.5
2.51.1
OFFICE SHARED
2.86
EXAM
2.52.1
EXAM
2.52.2
EXAM
2.52.3
EXAM
2.52.4
EXAM
2.52.6
EXAM/TREATMENT AIRBORNE PREC.
WR
2.39.4
ANTE ROOM
2.36.B.2

ED-Based Risk Screening

HIGH RISK SCREENING AND IDENTIFICATION TOOLS

- Identification of Seniors at Risk - ISAR *(McCusker et al., 1999)*

Table 6.1 ISAR Screening Questions (Warburton et al, 2004)

Question	*Response*	*Score*
1. Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis	Yes No	01 00
2. In the last 24 hours, have you needed more help than usual?	Yes No	01 00
3. Have you been hospitalized for one or more nights during the past six months?	Yes No	01 00
4. In general, do you have serious problems with your vision, that cannot be corrected by glasses?	Yes No	01 00
5. In general, do you have serious problems with your memory?	Yes No	01 00
6. Do you take six or more different medications every day?	Yes No	01 00

≥ 2 = Predicts Functional Decline, Recidivism, Institutionalization

ED Geriatrics Case Management

GERIATRIC EMERGENCY MANAGEMENT (GEM)

- ED Nurses focused on improving the care of older patients.
- Frail older patients receive specialized geriatric assessments and interventions to enhance their care.
- Effective at reducing hospital admissions, recidivism, and increasing adherence and satisfaction of patients and staff…

Sinha et al, Annals of Emergency Medicine, 2011

ED / Alternative Care Strategies

MOBILE LTC EMERGENCY NURSING PROGRAM

- ED Based Mobile RNs provide urgent care assessment and management services with 35 partnering LTC Homes.
- Model Involves - Prevention, Avoidance, Rapid ED Engagement and Follow-up Components.
- Up to a 30% decrease in ‘Non-Urgent’, ‘Less Urgent’, and ‘Urgent’ unscheduled Ambulance Transfers.
- The cost/visit with the Mobile Team is 21% less than an ED visit.
- Enhancements in resident quality of life, nursing knowledge, and overall ED and LTC provider satisfaction noted.

Alternative Inpatient Care Strategies

HOSPITAL AT HOME *(Leff, 2009; Shepperd et al., 2009)*

- Patients with acute illnesses requiring hospital-level care are identified in the ED and offered their care at home.
- Under this model costs were lower, patients experienced fewer clinical complications, mortality at six months was lower, and patients were more satisfied.

Inpatient Geriatrics Services

INPATIENT CONSULTATION TEAMS

- Proactive consultation teams with control over medical recommendations and that provide extended ambulatory follow-up and management are more likely to be effective. *(Palmer, 2003; Nikolaus et al. 1999, Marcantonio et al. 2001)*

ACUTE CARE FOR ELDERS (ACE) UNITS

- Can reduce the incidence of functional decline, hospital lengths of stay, and nursing home admissions. *(Palmer, 1994, 2000; Landelfeld, 1995; Wong, 2006)*
- ACE Principles: patient-centred care, frequent medical review, prepared environments, comprehensive discharge planning

MSH Acute Care for Elders (ACE) Unit

A NEEDS BASED RESOURCING MODEL OF CARE

- 28 Bed GIM Unit – Converted to ACE in April, 2011
- Unit-Based Nursing and Allied Health Staff with advanced training in Geriatrics w/ Daily PT Coverage.
- GIM Staff remain MRPs and select patients for admission.
- Protocolized Order Sets mean same standard of care is provided whether on or off the ACE Unit – with a focus on *function*.
- Geriatric Medicine and Psychiatry Services provide support through consultation.
- CCAC has become a key external partner.

MSH Acute Care for Elders (ACE) Unit

ADMISSION CRITERIA

- 65 and older with an acute medical illness + any THREE or more of the following:
  - A recent decline functional abilities
  - A recent change in cognition or behaviour
  - Problems common to older adults (falls, incontinence, acute and/or chronic adverse drug reactions, delirium etc)
  - Complex social issues
  - ISAR Score ≥ 2

Outpatient Geriatrics Services

AMBULATORY CARE FOR ELDERS (ACE)

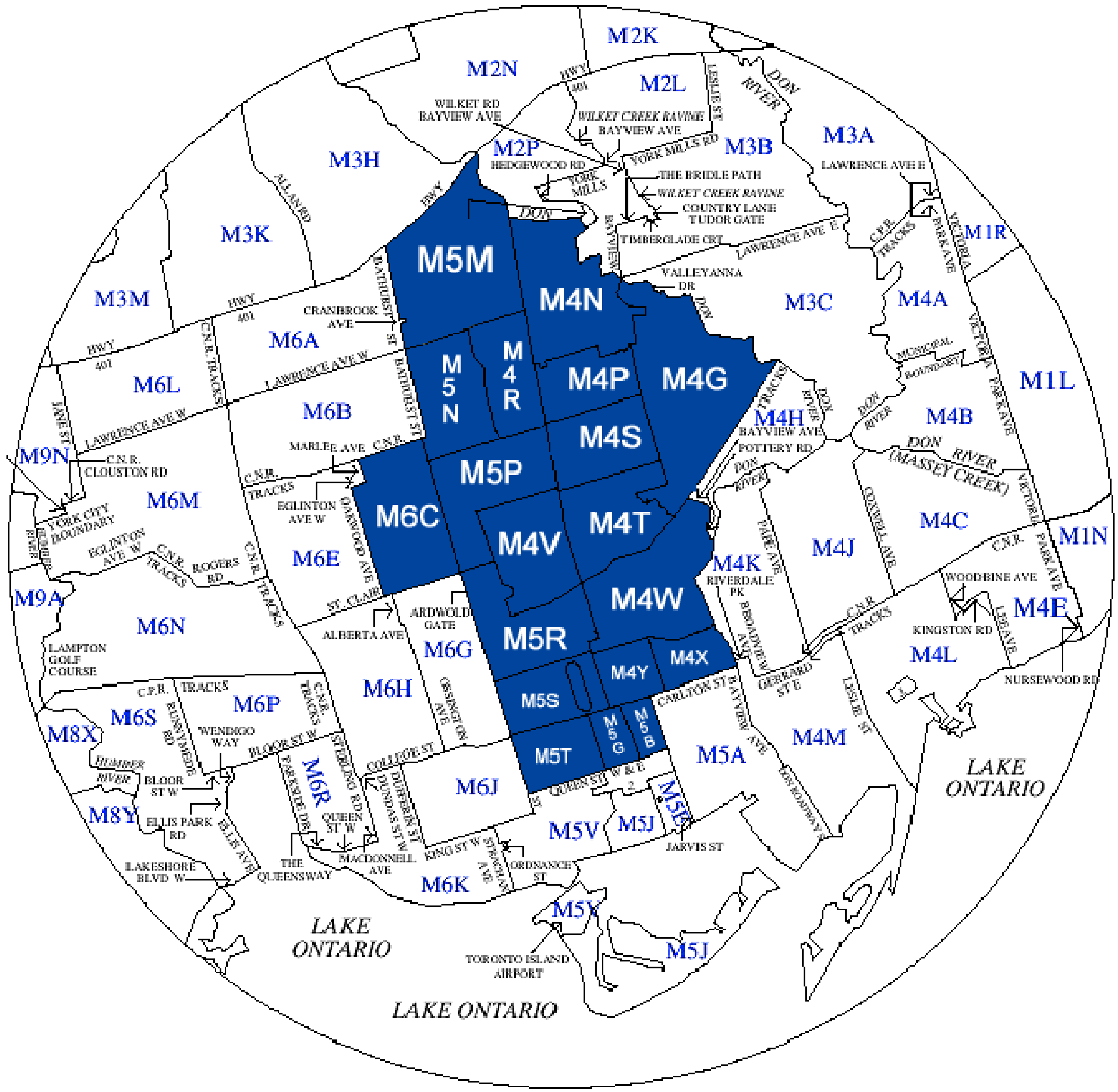
- *Urgent* and General - Comprehensive Geriatric Assessment and Management Services
- Post-Inpatient Discharge Follow-ups
- The ***first*** geriatrics clinic to have a dedicated CCAC Care Coordinator embedded in it as of June, 2011.
  - Specialty Care Clinics
  - Falls
  - Osteoporosis
  - Dementia
  - Palliative Care

Home-Based Primary and Specialty Geriatrics Services

TEMMY LATNER PALLIATIVE CARE PROGRAM

MSH / HOUSE CALLS PARTNERSHIP

- Interprofessional Mobile Team providing comprehensive primary care for homebound elders due to physical or cognitive frailty.
- GP, Nurse Practitioner, Occupational Therapist, Social Worker and Coordinator.
- Urgent Referrals ≤ 48hrs, Routine Referrals ≤ 10 Days.
- All House Calls patients have access to Geriatrician and Geriatric Psychiatry Consults and Follow-Ups in their Homes.
- The ***first*** hybrid primary/specialty geriatrics model in Canada.


M2K
M2N
M2L
M2P
M3A
M3B
M3H
M3K
M3M
M3C
M1R
M4A
M1L
M5M
M4N
M5N
M4R
M4P
M4G
M6A
M6L
M6B
M4H
M4B
M5P
M4S
M9N
M6M
M6C
M4T
M4V
M4C
M1N
M4J
M4K
M6E
M9A
M6N
M4W
M4E
M5R
M6G
M4X
M4L
M6H
M4Y
M5S
M6P
M8X
M6S
M5G
M5B
M4M
M5T
M5A
M6R
M6J
M5E
M8Y
M5V
M5J
M6K
M5Y
M5J
LAKE ONTARIO
LAKE ONTARIO
LAKE ONTARIO
WILKET RD
BAYVIEW AVE
HWY 401
WILKET CREEK RAVINE
BAYVIEW AVE
YORK MILLS RD
LESLIE ST
DON RIVER
LAWRENCE AVE E
HEDGEWOOD RD
YORK MILLS
THE BRIDLE PATH
WILKET CREEK RAVINE
COUNTRY LANE
TUDOR GATE
TIMBERGLADE CRT
LAWRENCE AVE E
VALLEYANNA DR
C.P.R. TRACKS
VICTORIA PARK AVE
CRANBROOK AVE
LAWRENCE AVE W
LAWRENCE AVE W
MUNICIPAL BOUNDARY
BAYVIEW AVE
POTTERY RD
DON RIVER
DON RIVER (MASSEY CREEK)
MARLEE AVE
C.N.R.
C.N.R. CLOUSTON RD
C.N.R. TRACKS
EGLINTON AVE W
YORK CITY BOUNDARY
EGLINTON AVE W
C.N.R. TRACKS
ROGERS RD
DUFFERIN ST
COXWELL AVE
PAPE AVE
WOODBINE AVE
RIVERDALE PK
ST. CLAIR
ARDWOLD GATE
ALBERTA AVE
KINGSTON RD
LAMPTON GOLF COURSE
BROADVIEW AVE
GERRARD ST E
NURSEWOOD RD
C.P.R. TRACKS
CARLTON ST
WENDIGO WAY
BLOOR ST W
OSSINGTON AVE
LESLIE ST
HUMBER RIVER
BLOOR ST W
COLLEGE ST
ELLIS PARK RD
QUEEN ST W
MACDONNELL AVE
KING ST W
STRACHAN AVE
ORDNANCE ST
JARVIS ST
LAKESHORE BLVD W
THE QUEENSWAY
TORONTO ISLAND AIRPORT

The MSH-CCAC ICCP Project

THE INTEGRATED CLIENT CARE PROJECT

- Starting April 1, 2011 MSH launched a 1 Year Intensive Case Management Project for up to 30 of its most complicated elders.
- 1 CCAC Care Coordinator is assigned to manage the care of these patients throughout the continuum in close collaboration with Geriatric Medicine, Psychiatry and Primary Care Providers.
- Goal is to ensure these patients access and receive appropriate and integrated care, experience smooth transitions, and are supported to remain at home for as long as possible.
- Early Wins and Opportunities for Development

Evaluating Mount Sinai's ACE Strategy

CATHETER UTILIZATION RATIO (Age 65+)

- *FY 09/10* = 56% → *19%*

OUT OF BED RATE ON ACE and (GIM) UNITs (Age 65+)

- *MOVE-iT Trial Pre-Intervention Baseline Data*
  = *42.2%* (39.4%) (Toronto Peers = 32.2%)

PRESSURE ULCER INCIDENCE ON ACE UNIT

- *FY 09/10* = 2.4% → *2%*

STAFF EXPERIENCE w/ GERIATRICS

- *FY 09/10* = 63 → *66.9* (Canadian Average = 56.2)

Evaluating Mount Sinai's ACE Strategy

LENGTH OF STAY (Age 65+)

FY 09/10 = 8.0 → *6.5* (Provincial Average = 9.8)

% RETURN HOME AT DISCHARGE (Age 65+)

- *FY 09/10* = 71.7% → *78.4%* (LHIN Average = 70.9%)

READMISSION w/n 30 DAYS (Age 65+)

- *FY 09/10* = 14.4 → *12.5%*

PATIENT SATISFACTION (Age 65+)

- *FY 09/10* = 95.9 → *96.8%* (LHIN Average = 93.5%)

Concluding Thoughts

- Whereas hospitalization offers older patients potential benefits it also exposes them serious risks.
- Pursuing an ACE Strategy requires a ***shift*** in traditional thinking.
- Programs only succeed through collaboration and partnership internally and externally.
- Implementing an ACE Strategy Principles will allow us remain leaders in the delivery of complex care across the continuum.

Questions?

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A System to Support Integrated Care…