Restoring Health Program Diabetes Model

Rebecca Smithers
Clinical Coordinator
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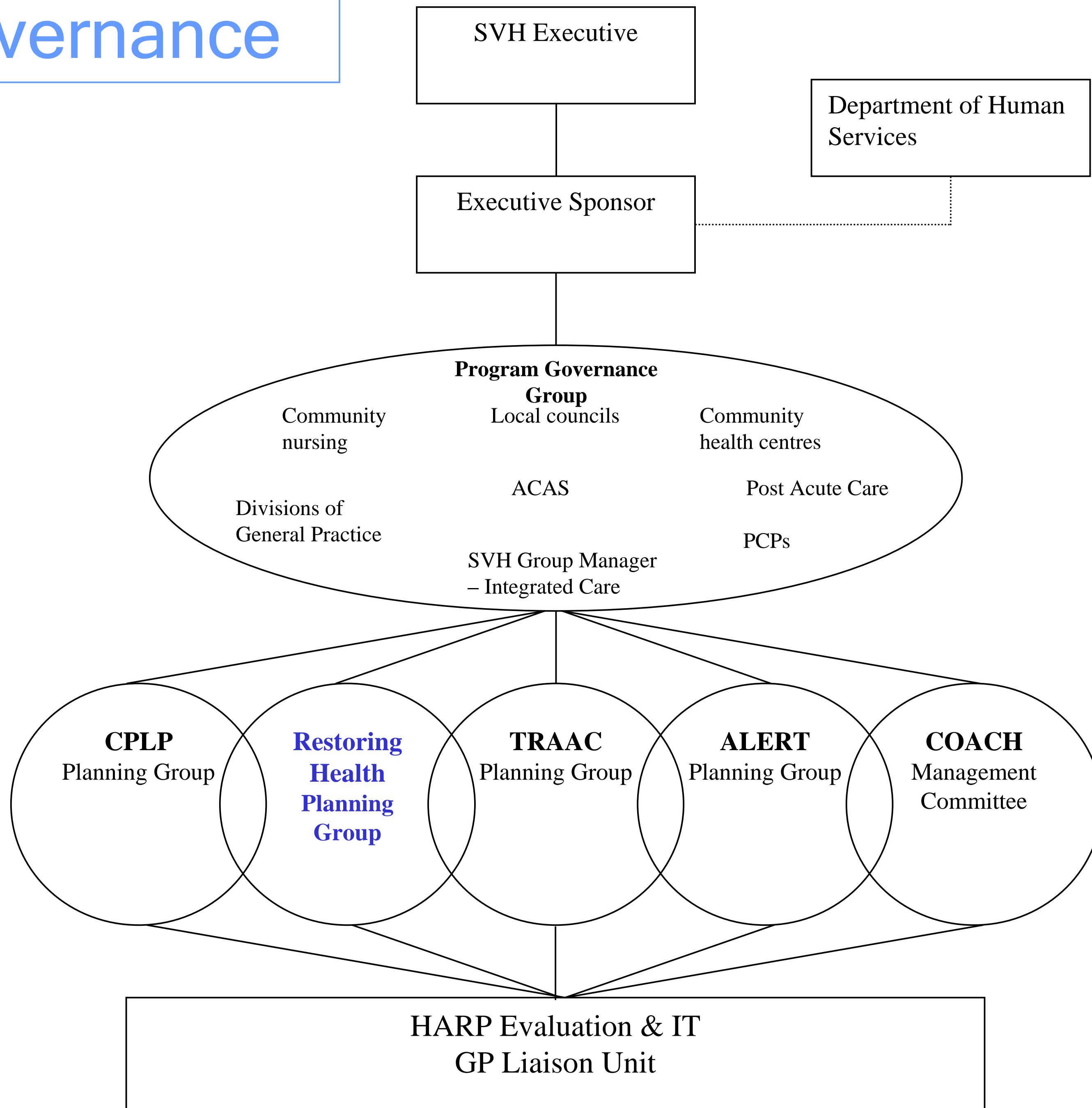
St Vincent's

Continuing the Mission of the Sisters of Charity

Restoring Health…

- HARP February 2003
- 3 target conditions under one umbrella:
  - Heart failure, lung disease, diabetes
- St Vincent's Hospital & partner agencies
  - *Darebin Community Health*
  - *Inner East Community Health*

Governance



Staff and EFT

Acute

- Program manager 1.0
- Clinical Coordinator 1.0
- Contact Liaison 3.0
- Heart failure CNC 0.4
- Diabetes CNC 1.0
- Allied health assist 1.0
- Admin 1.0

Community

- Community RN 2.0
- Dietician 0.8
- Physiotherapist 1.0
- OT 1.0
- SW 2.0
- Clinical psych 0.6
- Speech pathology 0.8
- Pharmacist 2.0

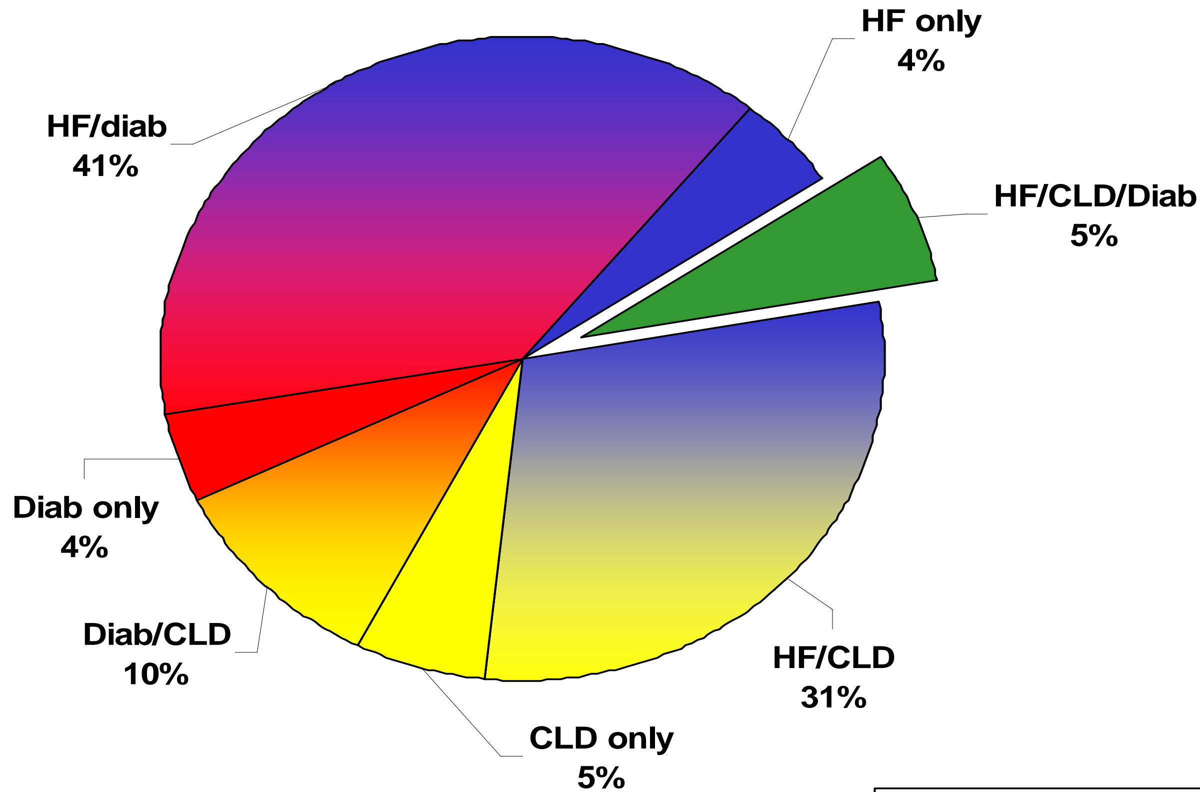
An ‘at risk’ population

- Chronic Disease
- Moderate → severe severity

    71% lung disease (MRC Dyspnoea Gr 3-5)
    67% heart failure (NYHA Gr III-IV)
    56% diabetes (HbA1c>8.1%)

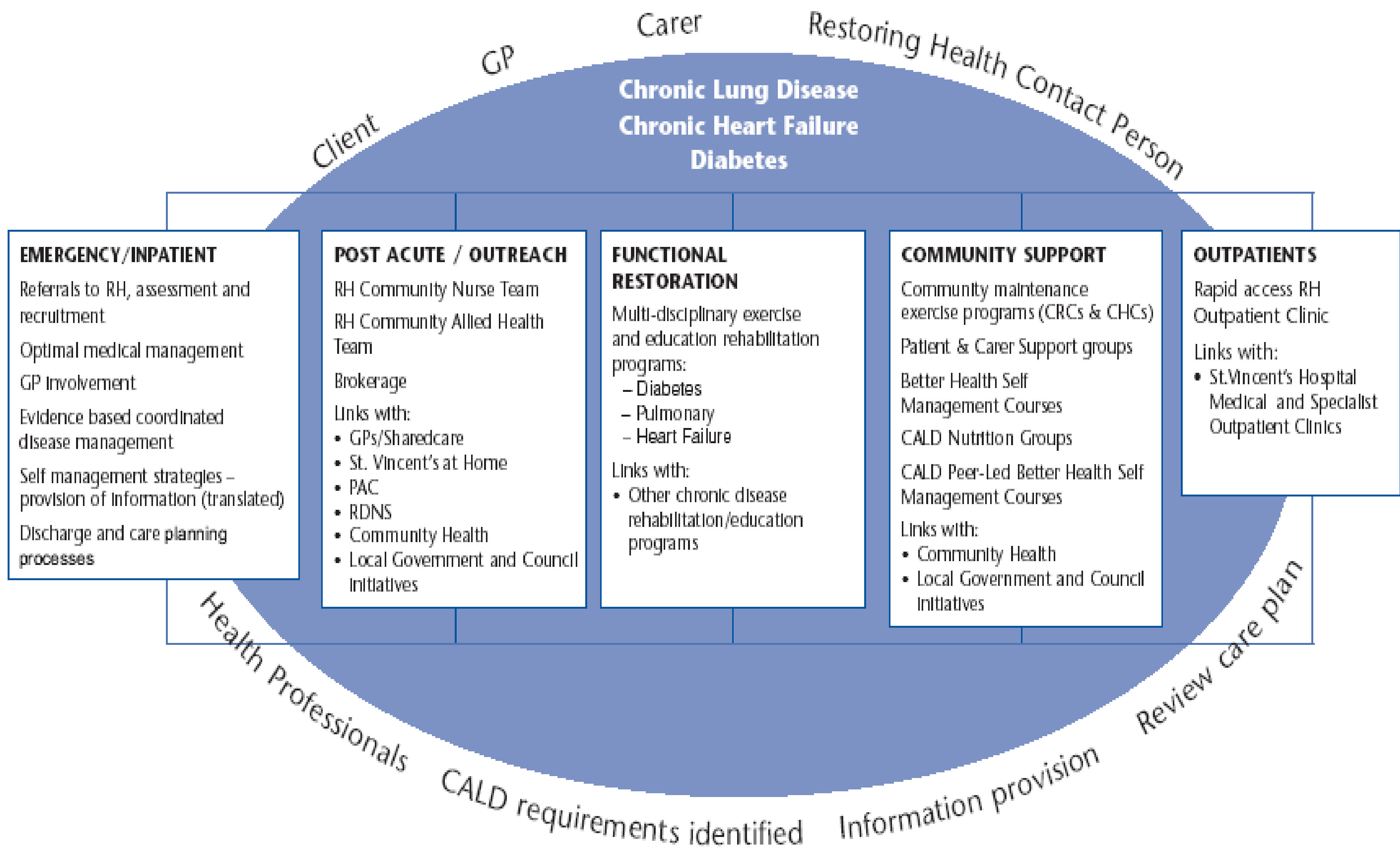
- Elderly: 61% > 70 yrs
- Live alone: 40%
- No carer: 65%
- CALD: 65% born overseas

Disease Diagnosis of Restoring Health Patients



one chronic disease = 13%
two or more chronic diseases = 87%

St.Vincent's Health – Restoring Health Model



Key contact persons
“The Glue”

- Central liaison point for client, carer, GP & community team
- Know each patient's baseline status
- Liaise at outpatient medical appointments
- Seamless navigation of health sectors
- Patient advocate
- Identify disease specific gaps
- Facilitates immediate follow-up care in community

ED & Inpatient phase

- Referrals: ED screeners ("ALERT") & recruitment pagers.
- Where: SVH ED, Inpatients, Outpatient Clinics
- Who: T1 or T2, particularly unstable, poorly controlled DM.
  - More complex needs than usual care ie GP or SVH Diabetes Education service
  - Exclusion criteria: min symptoms, significant co-morbidities, no consent,

Mean HbA1C at recruitment = 9.1

~96% have diabetes-related complications

At time of recruitment

- **Assessment**: Diabetes CNC
  - Risk factors, complications & diabetes self-management strategies
  - Previous intervention/education
- **Intervention:**
  - Diabetes education (+/- family/care givers) +/- interpreters
  - Facilitate NDSS subscription if required
  - Care planning in conjunction with GP
  - Referrals to outreach team: nursing and allied health
    - 80-90% require more than RN alone
- **Links with:**
  - Dept of Endocrinology, General Medicine, Vascular, Renal; SVH clinics, SVH Diabetes Educators, SVH Podiatry

If / when represent to SVH

StV

- Early liaison & referrals with Medical/RN/AH staff
- Monitoring BSLs on ward & appropriate medication management
- Ensuring accuracy and appropriateness of medication and device management
- Re-education and care planning as required
- Ward staff education/support
- Facilitate early discharge with follow up supports

Outreach

- RNs / Allied health
  - Continuation of careplan
  - Monitoring BSLs / initiate alteration where required
  - Reinforcing education & self management strategies established
  - Further referrals as required
- Liaise closely with GP & RH team
- Links with existing community services
- Back up plan → Rapid Assessment Clinic

Rapid Assessment Clinic

- 6 appointments across 4 days
- Referral to contact person from GP, client, RH staff or carer
- Rapid physician review & GP liaison
  - *Typically unexpected hyperglycaemia, infections, multi-disease factorial problems,*
- Access to pathology, radiology, pharmacy, diagnostics
- Majority return home post medical intervention / ↑supports
- Immediate follow up in community

Outpatients

- Links to clinics and physicians
- Reassess clients
- Advocacy
- Address current issues
- Handover pertinent details to physicians
- Feedback to outreach staff

→ ***Jan-June 2006: 352 appointments attended***

Diabetes Rehab

- 10 week outpatient exercise and education
- Darebin CRC
- RN, Physio, AHA
- Key outcomes
  - 6MWT
  - Generic QOL
- Refer on to maintenance programs

- Education topics:
  - Exercise
  - Diabetes management complications, hypo/hypers, medications,
  - Nutrition/label reading
  - OT
  - Optometry
  - Podiatry
  - Psychological self mx.
  - Shopping trip

Restoring Health Program

Restoring Health Program

Diabetes Rehab Outcomes…

- QOL: SF-36 trial 2006

  n=17

  $p<0.05$ energy and well-being

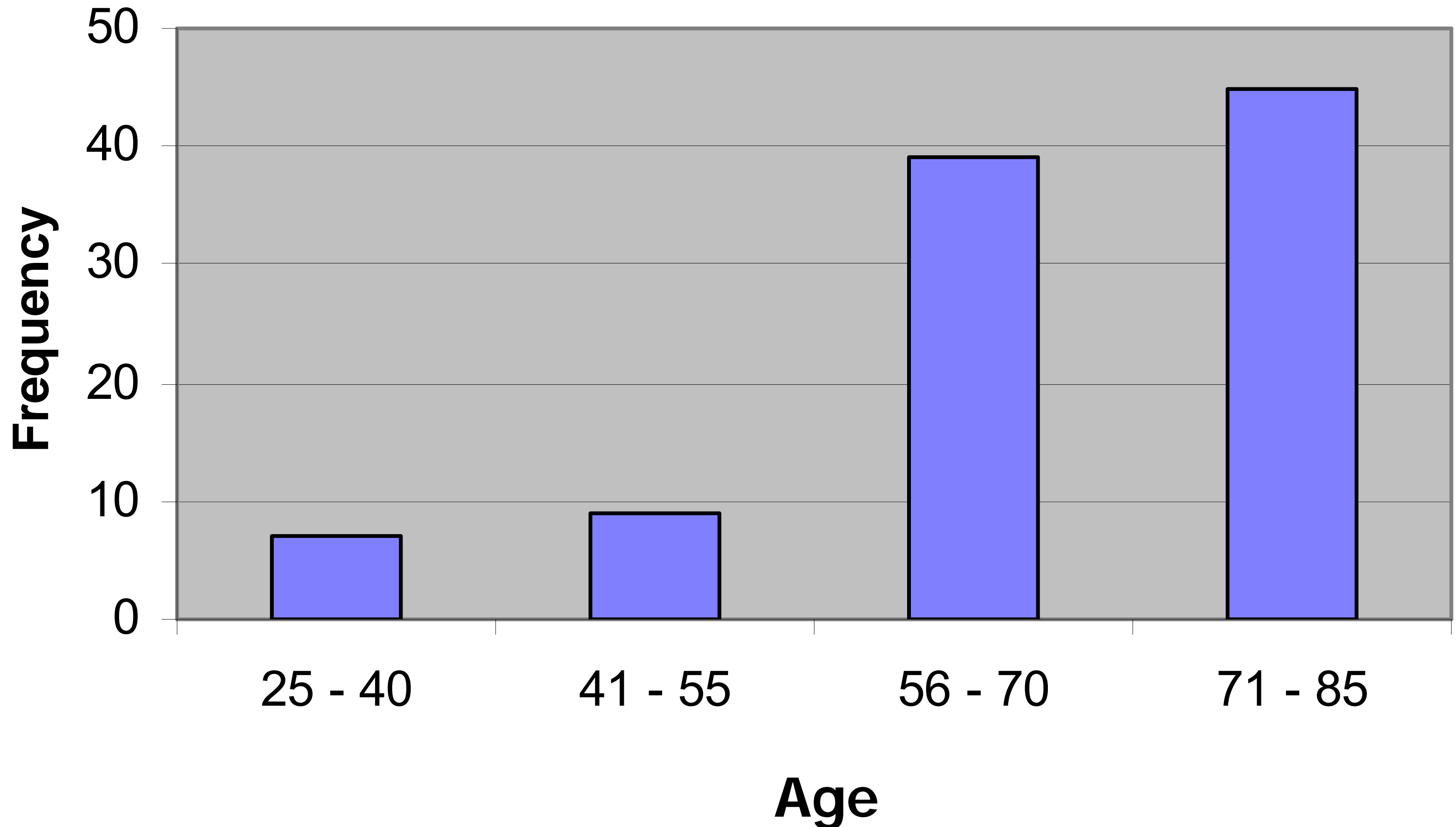
- Function: 6 minute walk test

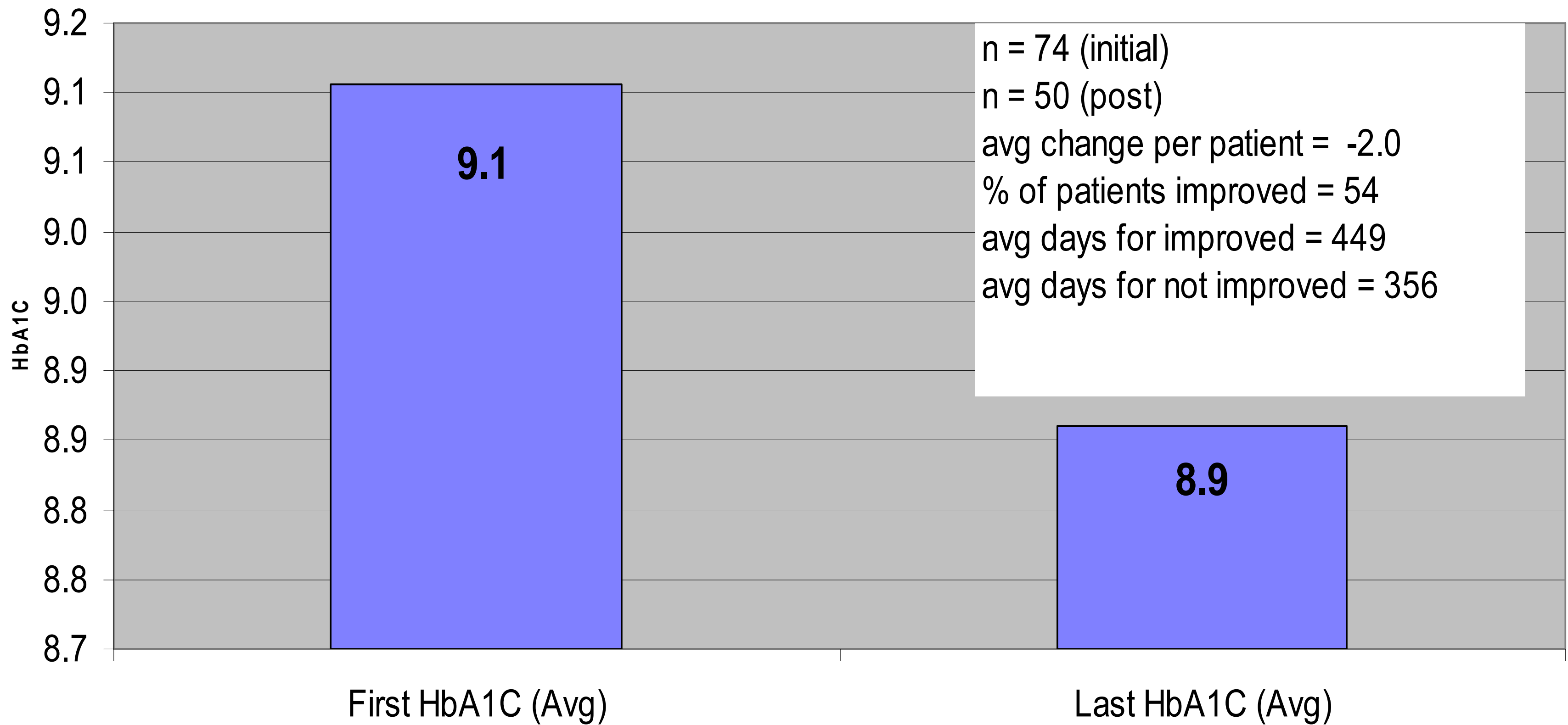
  50% have clinically significant improvement

- HbA1C

Restoring Health Program

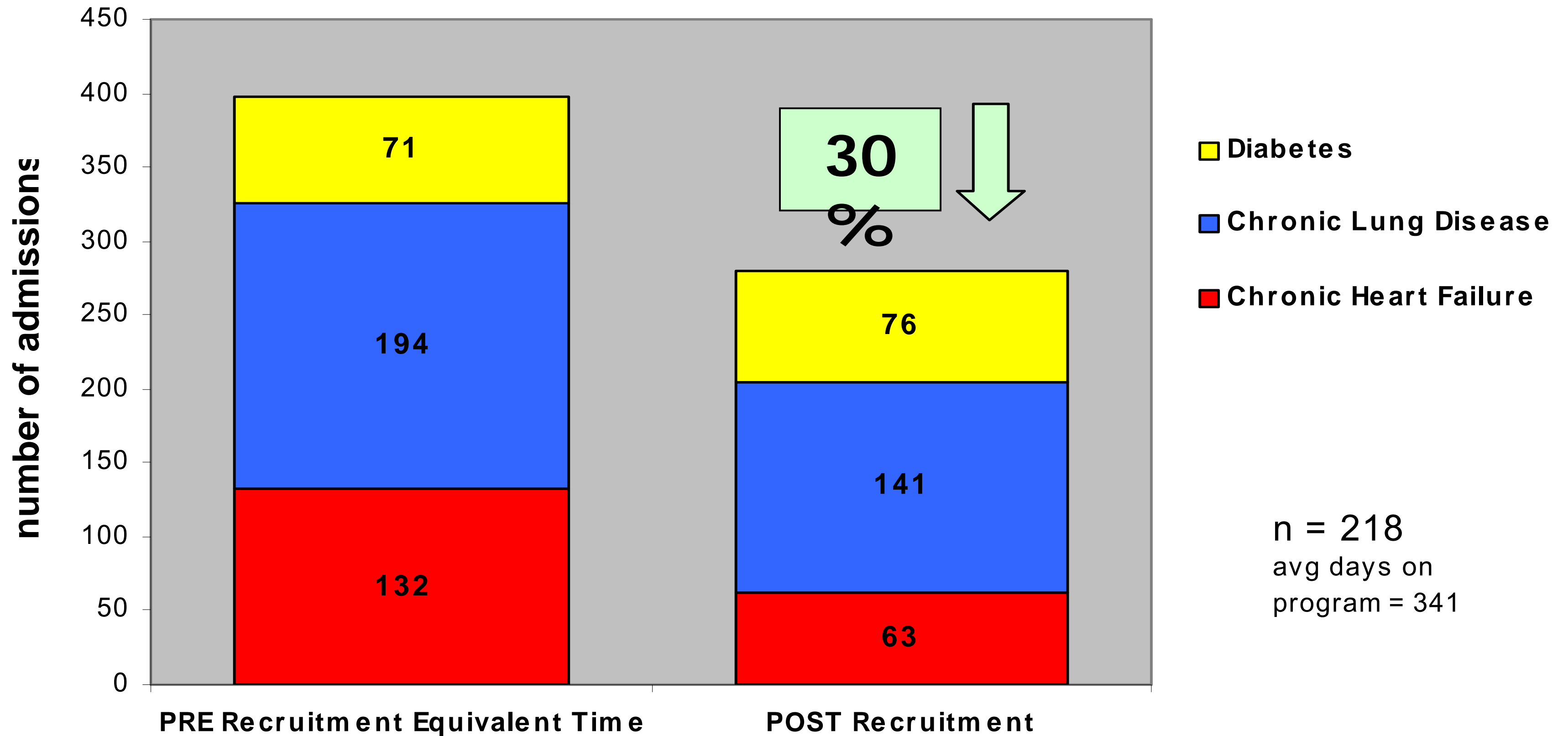
Age of Restoring Health Diabetes Recruits Feb 03 - May 06

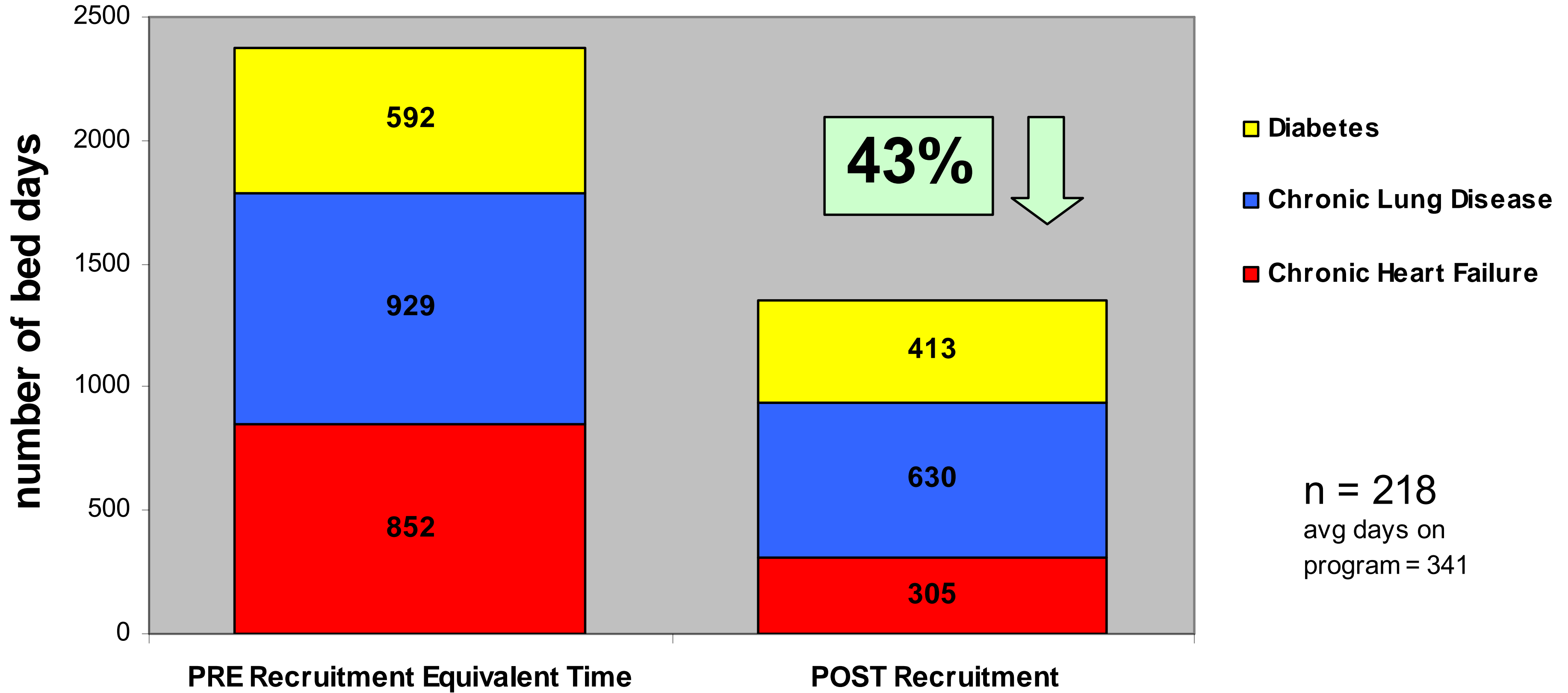



Restoring Health - HbA1C (Feb 2003 - May 2006)
9.2
9.1
9.1
9.0
9.0
8.9
8.9
8.8
8.8
8.7
HbA1C
9.1
8.9
n = 74 (initial)
n = 50 (post)
avg change per patient = -2.0
% of patients improved = 54
avg days for improved = 449
avg days for not improved = 356
First HbA1C (Avg)
Last HbA1C (Avg)

Healthcare Utilisation

Restoring Health Program (Feb 2003 - December 2005)
Total Number of Presentations
number of presentations
500
450
400
350
300
250
200
150
100
50
0
85
239
153
30 %
76
175
83
Diabetes
Chronic Lung Disease
Chronic Heart Failure
n = 211
avg days on program = 341
PRE Recruitment Equivalent Time
POST Recruitment


Restoring Health Program (Feb 2003 - December 2005)
Total Number of Admissions
number of admissions
450
400
350
300
250
200
150
100
50
0
71
194
132
30 %
76
141
63
PRE Recruitment Equivalent Time
POST Recruitment
Diabetes
Chronic Lung Disease
Chronic Heart Failure
n = 218
avg days on program = 341


Restoring Health Program (Feb 2003 - December 2005)
Total Bed Days
number of bed days
2500
2000
1500
1000
500
0
592
929
852
413
630
305
43%
Diabetes
Chronic Lung Disease
Chronic Heart Failure
n = 218
avg days on
program = 341
PRE Recruitment Equivalent Time
POST Recruitment

Key principles…

1. Restoring Health Key Contact Liaison Role
2. Integrated team across Acute and Community Sectors → common goals
3. Evidence-based disease specific care across the continuum
4. CLD, CHF and Diabetes *under the one umbrella*
5. Rapid Access Outpatient Clinic
6. Disease Specific Rehabilitation and Community Maintenance Programs
7. Integrated program for CALD backgrounds
8. Navigate, not replicate or duplicate