The Asheville Program

John Miall
It’s the System That Needs Care

- Over half of all healthcare via managed care
- Largest increase in 6 years in costs
- It’s evolution not revolution
- Giving patients the resources to be well
- Buy VALUE
- Taiwanese healthcare system
<table>
<thead>
<tr>
<th>Frequency</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Frequency</td>
<td>Low Severity</td>
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<td>Low Frequency</td>
<td>Low Severity</td>
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<td></td>
<td>High Severity</td>
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<td>High Severity</td>
</tr>
</tbody>
</table>
“Kaiser physicians know what things need to be done for diabetic patients, but due to the constraints of modern medical practice they seldom have the time to do them. . . .”

Managed Care News 1999 Apr.

“Ultimately, all care is managed by patients.”

Dan Garrett, Exec. Dir. NCAP
Patient Centric Drug Therapy

• Patient is the:
  • Applier
  • Utilizer
  • Determiner

...of the outcomes associated with medication “technology”

Patients on drug therapy ultimately “manage their own care”.

50% of Prescriptions that are written are not filled or taken
Diabetes-Related Comorbidities

- 2–4 times greater risk of heart disease
- 60–65% have hypertension
- 2–4 times greater risk of stroke
- 60–70% have some degree of nervous system damage
- Leading cause of adult blindness
- Leading cause of ESRD (40% new cases)
- >50% lower limb amputations
Diabetes-Related Indirect Costs

- 8.3 sick-leave days annually
- 1.7 sick-leave days for employees without diabetes
- $47 billion in productivity forgone due to disability, absence, and premature mortality
Why Does The Insurance Industry Exist?

To make a Profit!
Unintended Consequences of The Decisions We Make

- I want to reduce my health care costs by $500,000 this year.
- We can fix our costs by just buying insurance.
- We need some case management.
- We need a wellness program.
- What is “X” doing about their costs?
- Employees need to take more financial responsibility for the cost of care. (70 years of cost shifting)
In the Beginning

“Partnering” with physicians, hospital system, NCAPh, NCCPC, UNC School of Pharmacy

Invitation to all pharmacists in community

Responses of independents vs. chains

Two weekends (32 hours) of training by physicians and diabetes educators

Compensation after results

Fee schedule

$2,400 first year, ongoing average of $48.02 per monthly visit through 2002.
Patient Incentives and Care Model

* Patient selection / recruitment
* Patient education — Mission + St. Joseph’s Diabetes Center
* Matching patients to pharmacists
* Incentives:
  * Labs without co-pays
  * Glucose meters
  * PBM co-pay waivers
* The operative word in health care is “care” (Madge testimonial)
How They Do It

“Patient making better food choice. Blood glucose much improved. 2 x 1.5 cm wound RLE. Referred to physician for evaluation and therapy.”
CITY OF ASHEVILLE DIABETES PROJECT

% of Patients

0% 10% 20% 30% 40% 50% 60%

Prior to Program 14 Months 24 Months

ACE INHIBITOR

0% 33% 57%

APPROPRIATE MEDICATION
Clinical Outcomes:
Avg. Glycosylated Hemoglobin

- Baseline: 7.60
- 8 Months: 7.00
- 14 Months: 6.20
- 24 Months: 6.8
- 42 Months: 6.7
- 48 Months: 6.98
- 60 Months: 6.7
- 72 Months: 7.4

HbA$_{1c}$
City of Asheville Total Diabetes Medical Costs

58% savings based on actual 2001 costs vs. expected 2001 costs (1996 costs + annual CPI medical care inflation figures)
Direct Medical Costs Over Time


![Bar chart showing direct medical costs over time](chart.png)

<table>
<thead>
<tr>
<th>Follow-up Year</th>
<th>Mean Cost / Patient / Year</th>
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<tbody>
<tr>
<td>Baseline</td>
<td>$8,000</td>
</tr>
<tr>
<td>1</td>
<td>$7,000</td>
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<tr>
<td>2</td>
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<tr>
<td>3</td>
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<tr>
<td>4</td>
<td>$4,000</td>
</tr>
<tr>
<td>5</td>
<td>$3,000</td>
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Legend:
- **Other Rx**
- **Diabetes Rx**
- **Claims $**
Average Annual Diabetic Sick-Leave Usage (COA)

<table>
<thead>
<tr>
<th>Year</th>
<th>Baseline</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
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</thead>
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<tr>
<td></td>
<td>12.6</td>
<td>6</td>
<td>8.46</td>
<td>5.68</td>
<td>5.81</td>
<td>5.67</td>
<td>6.01</td>
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</table>
Sick Leave Usage By Time In Program

- Baseline: 11.1
- 1 Year: 6.9
- 2 Years: 6.9
- 3 Years: 9.1
- 4 Years: 8.3
- 5 Years: 4.3
- 6 Years: 6.6
DIABETES IN WORK FORCE

- Average of 1000 employees over 5 years
- 60 to 100 diabetics expected
- 32 = average annual percentage of workers with lost time injuries for 5 years
- 1.97 to 3.2 = expected number of lost time injured workers in average year with diabetes
CITY INDEMNITY INJURIES BY YEAR

![Bar chart showing indemnity claims by year from 1997 to 2001.]
DIABETIC MANAGEMENT INDIANITY CASES

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1


Indemnity
Patient Self-Management Program℠

- Baseline A1c = 7.9
- Visit 1 Percentages
  - Influenza Vaccination: 40% current
  - Foot Exam: 28% current
  - Eye Exam: 34% current
  - Blood Pressure: 73% current
  - Lipid Profile: 49% current
- Visit 6 Percentages
  - Influenza Vaccination: 75% current
  - Foot Exam: 80% current
  - Eye Exam: 80% current
  - Blood Pressure: 92% current
  - Lipid Profile: 94% current

A1c @ 10 months = 7.1
Clinical - HEDIS 2003 Indicators
...Averages through 25-Sep-04 (n=256)

※ NCQA Commercial Accredited Plans
  • A1c Testing = 85%
  • A1c Control (< 9) = 68%
  • Lipid Profile = 88%
  • Lipid Control (< 130) = 60%
  • Lipid Control (< 100) = 31%
  • Flu Shots = 48%
  • Eye Exams = 49%

※ PSMP Pilot Sites – (Aggregate)
  • A1c Testing = 100%
  • A1c Control (< 9) = 94%
  • Lipid Profile = 100%
  • Lipid Control (< 130) = 78%
  • Lipid Control (< 100) = 49%
  • Flu Shots = 77%
  • Eye Exams = 82%
The pilgrims did not land at Plymouth Rock with a Blue Cross card in their wallets
Conclusions

- Pharmacists have had the opportunity to serve on the frontline of patient care, and have made a difference.
- Physicians with patients in the program have recognized the positive impact on care.
- Collaboration plus innovation leads to reduced healthcare costs.
- Employers benefit by lowering or eliminating barriers to care.