
Providing a Medical Home for the Chronically Ill through Integrated Workplace Health

November 24, 2008

Sharon Glave Frazee, PhD
Vice President, Health Informatics & Research
Take Care Health Systems

Background: Medical Home

- “The medical home is a real and virtual relationship with a doctor centered around a patient’s needs.” (Dr. Paul Grundy, IBM – Financial Week, March 12, 2008)
- “The medical home is not a house, hospital or other building. Rather it is a term used to describe a health care model in which individuals use primary care practices as the basis for accessible, continuous, comprehensive, and integrated. The goal of the medical home is to provide a patient with a broad spectrum of care, both preventative and curative, over a period of time and to coordinate all the care the patient receives.” (Deloitte, The Medical Home: Disruptive Innovation for a New Primary Care Model, page 3)

Background: Medical Home

- The Medical Home:
 - Encourage the development of an ongoing relationship with a trusted clinician
 - Team approach to delivering comprehensive, coordinated care
 - Preventative and curative care
 - Made easier by use tools such as electronic medical records
 - Compassionate
 - Provides expanded access to care
 - Culturally effective
 - Family-centered

The need for the medical home is greater than ever....

- Increased prevalence of chronic diseases
- Growing shortage of primary care clinicians
- Graying of America

Medical Home & Chronic Disease

- Health care costs are rising primarily due to the increase in chronic condition prevalence

EXHIBIT 3
Decomposition Of Change In Nominal Health Care Spending, Fifteen Most Costly Medical Conditions, 1987-2000

Condition	Total change in spending (millions of dollars)	Percent change in spending attributable to		
		Increased cost per treated case	Rise in treated prevalence	Increased population
Heart disease	26,228.5	68.6	1.1	30.3
Pulmonary conditions	24,792.0	37.5	41.9	20.6
Mental disorders	24,503.3	21.1	59.2	19.7
Cancer	17,734.3	41.9	27.4	30.7
Hypertension	15,395.8	59.8	18.9	21.3
Trauma	14,596.6	169.1	-108.5	39.5
Cerebrovascular disease	11,078.9	20.8	60.3	18.9
Arthritis	10,282.8	44.3	31.6	24.1
Diabetes	9,626.8	23.6	49.8	26.6
Back problems	9,486.4	21.7	52.6	25.8
Skin disorders	7,286.5	54.8	22.0	23.2
Pneumonia	7,203.8	93.8	-18.4	24.6
Infectious disease	6,191.6	95.2	-17.5	22.3
Endocrine	5,029.1	28.0	43.4	28.6
Kidney	3,231.4	8.9	55.8	35.4

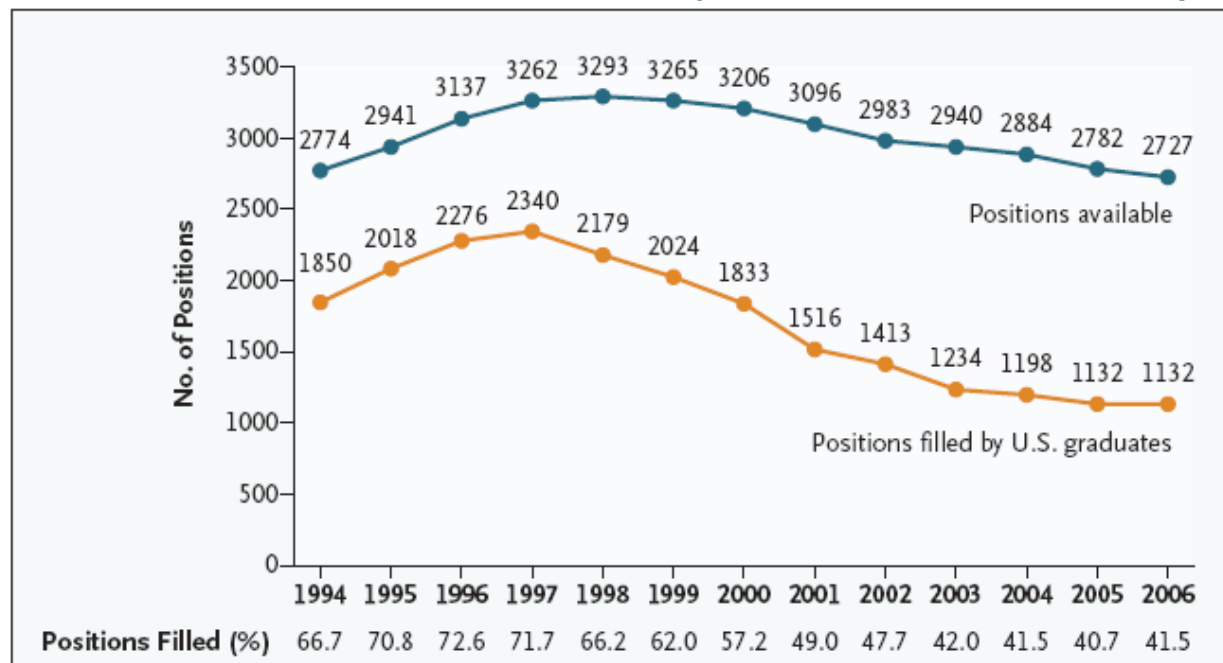
SOURCE: 1987 National Medical Expenditure Survey (NMES) and 2000 Medical Expenditure Panel Survey, Household Component (MEPS-HC).

NOTE: All changes were statistically significant at the .05 level, except for change in spending, kidney disease (at the .10 level); rise in treated prevalence, heart disease (not significant); and increased cost per treated case, endocrine and kidney disease (not significant). Medical conditions ranked by change in spending between 1987 and 2000.

From: Thorpe KE, Florence CS, Joski P. Which Medical Conditions Account for the Rise in Health Care Spending? *Health Affairs*. 2004;w4-437.

The Growing Shortage of Primary Care Clinicians

- *“The crisis of primary care is conspicuously absent from the list of national priorities for health care reform.”*
(Sepulveda, Bodenheimer, and Grundy. *Health Affairs*, 2008)

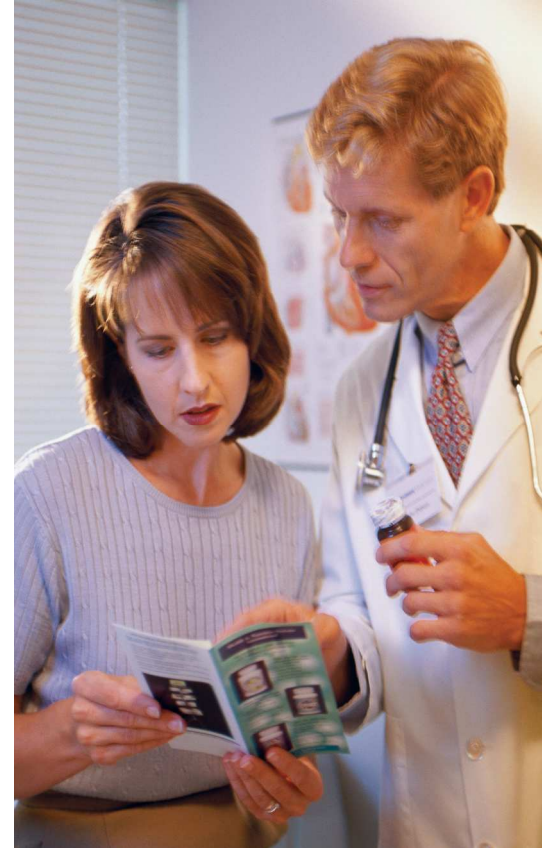


Family Medicine Residency Positions and Number Filled by U.S. Medical School Graduates.

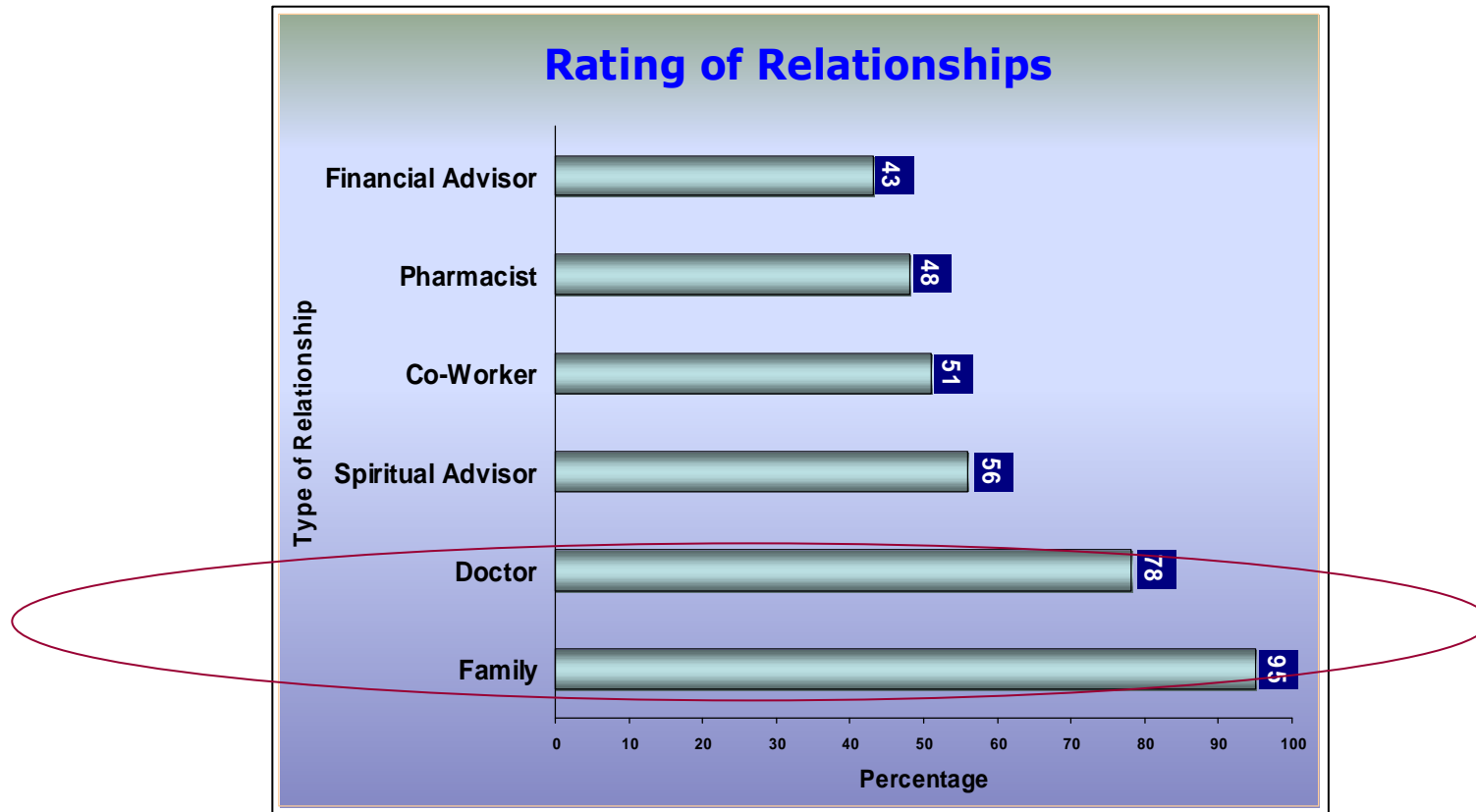
From the American Academy of Family Physicians, based on data from the National Resident Matching Program.

Developing a Medical Home at the Workplace: Leveraging the Trusted Clinician

- Trusted Clinician at the workplace health center as the collaborative “integrator” - bringing primary care and disease management together
- Medical interventions are more likely to have an impact when they are coordinated with the Trusted Clinician
- Workplace health through a Trusted Clinician can be a powerful influence in changing behavior and improving health
- Workplace clinicians can tailor interventions to meet the needs of a specific population



The Trusted Clinician Can be a Powerful Resource

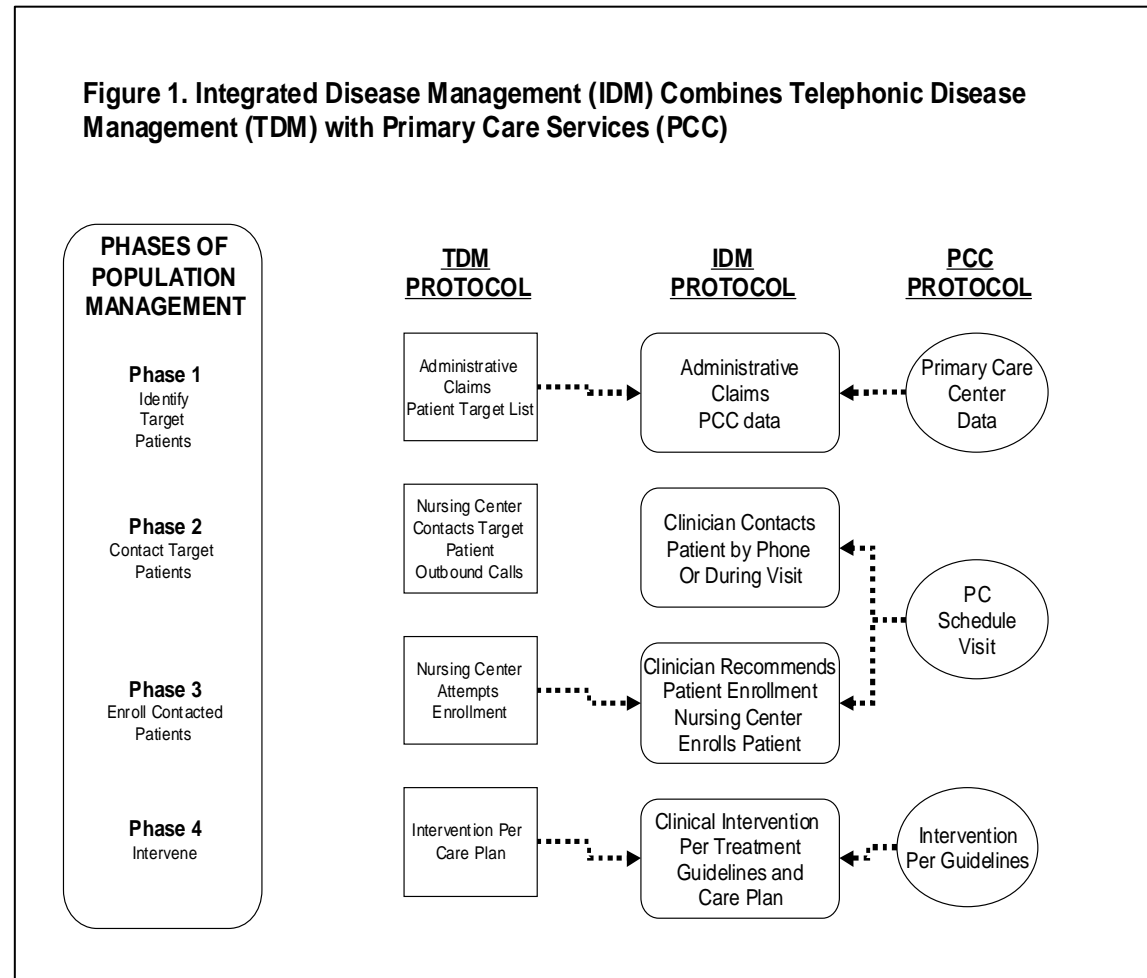


Source: Magee, J., *Relationship Based health Care in the United States, United Kingdom, Canada, Germany, South Africa and Japan. 2003*

Integration of
Primary Care & Disease Management =
Integrated Disease Management (IDM)

What is Integrated DM ?

- Combines primary care center and centralized, nursing-based telephonic care
- Goals are to improve:
 - Contact rate of the target population
 - Enrollment rate for contacted members
 - Outcomes



Setting the stage to test IDM: Strong Vendor-Client Relationship

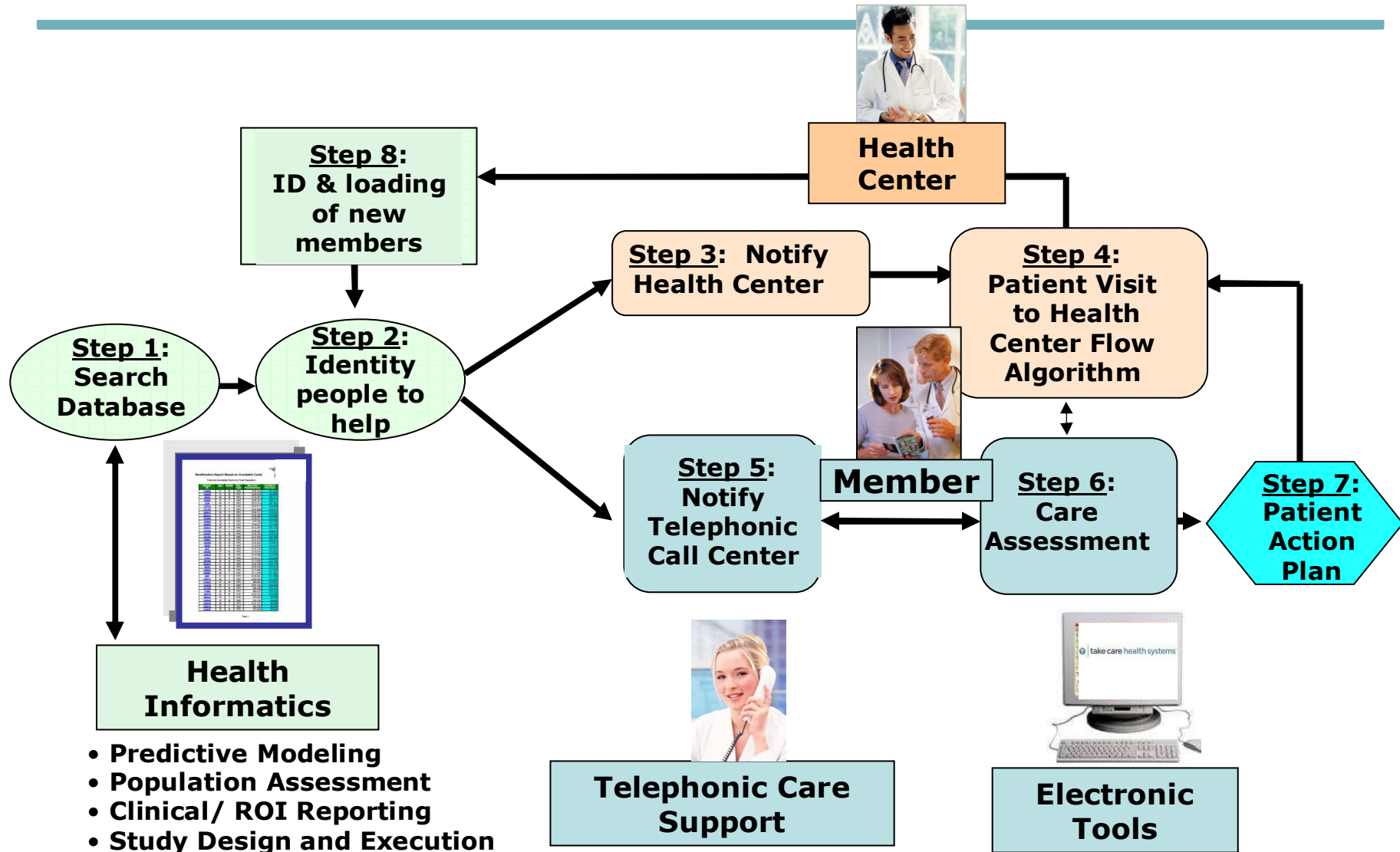
- Vendor already providing Workplace health services
 - Primary care and pharmacy
 - Occupational health, preventive care, and wellness
- Vendor plays strategic role with client-partner
 - Collaborative partner for health and productivity management strategy development/implementation
 - Data analysis and results interpretation
 - Goal-directed clinical interventions
 - Readily accessible driver of operational integration
- Healthcare cost savings is a secondary (but anticipated) result

Building relationships, trust and engagement

Study Objectives and Methods – 3 part study

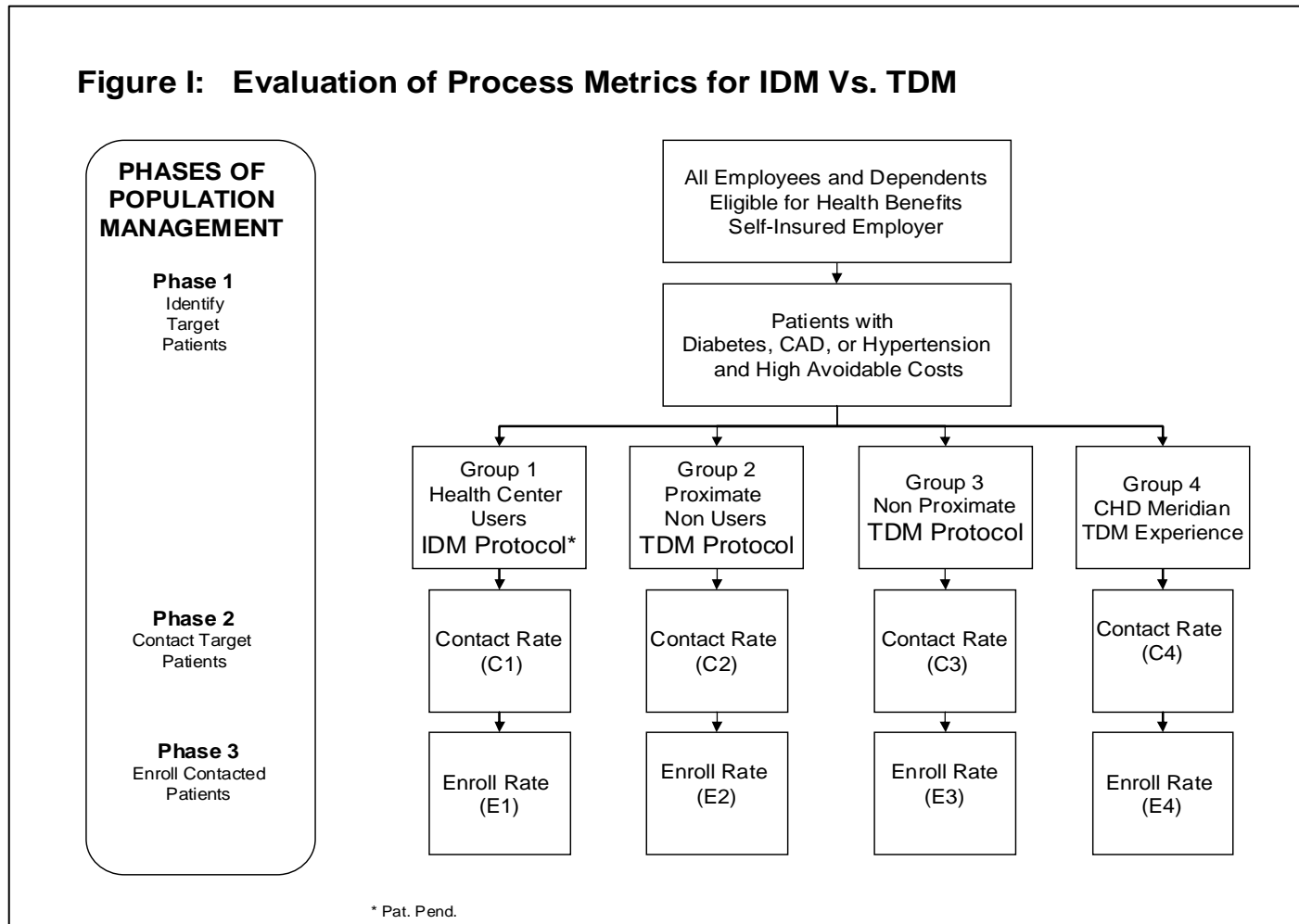
- Study Objective #1: Test the hypothesis that the IDM protocol would have higher contact, enrollment, and engagement rates than traditional remote DM
- Study Objective #2: Test the hypothesis that the IDM protocol would have higher retention rates than traditional remote DM
- Study Objective #3: Test the hypothesis that the IDM protocol will improve clinical outcomes for participant
- Method: Prospective cohort study methodology

Integrated Disease Management Process



Study Design

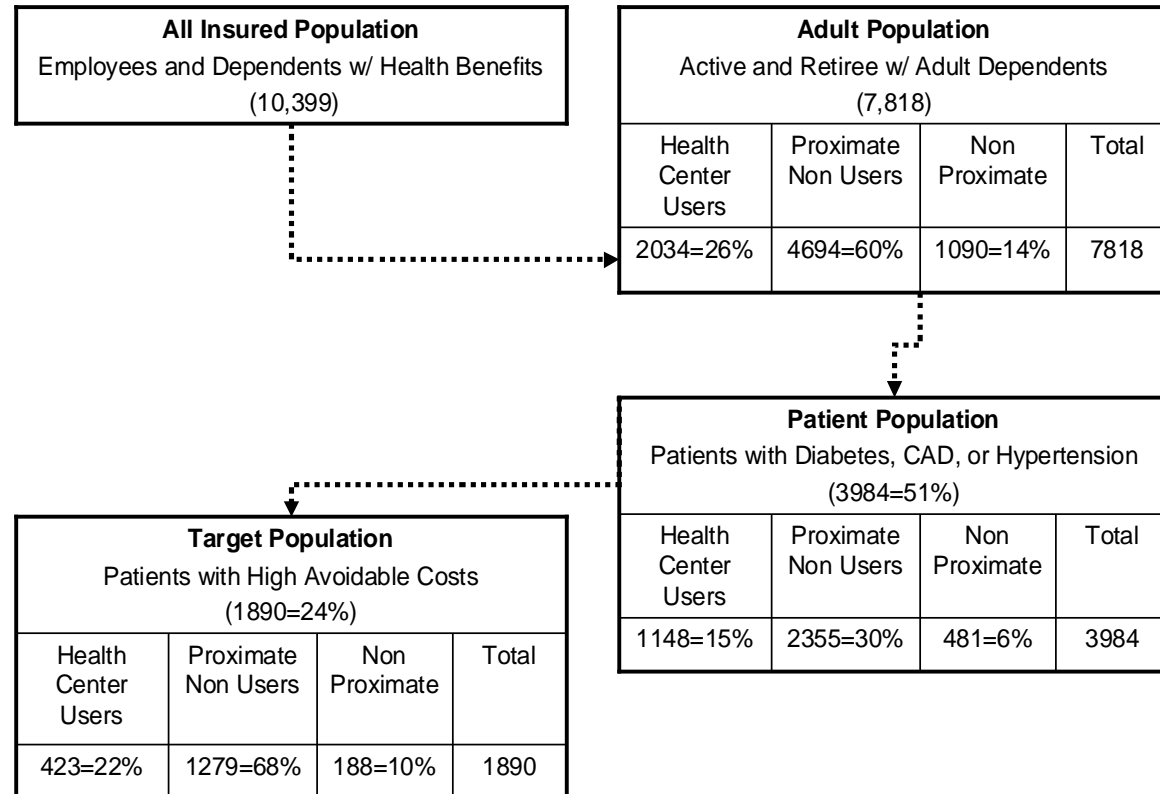
Figure I: Evaluation of Process Metrics for IDM Vs. TDM



Target Population Selection

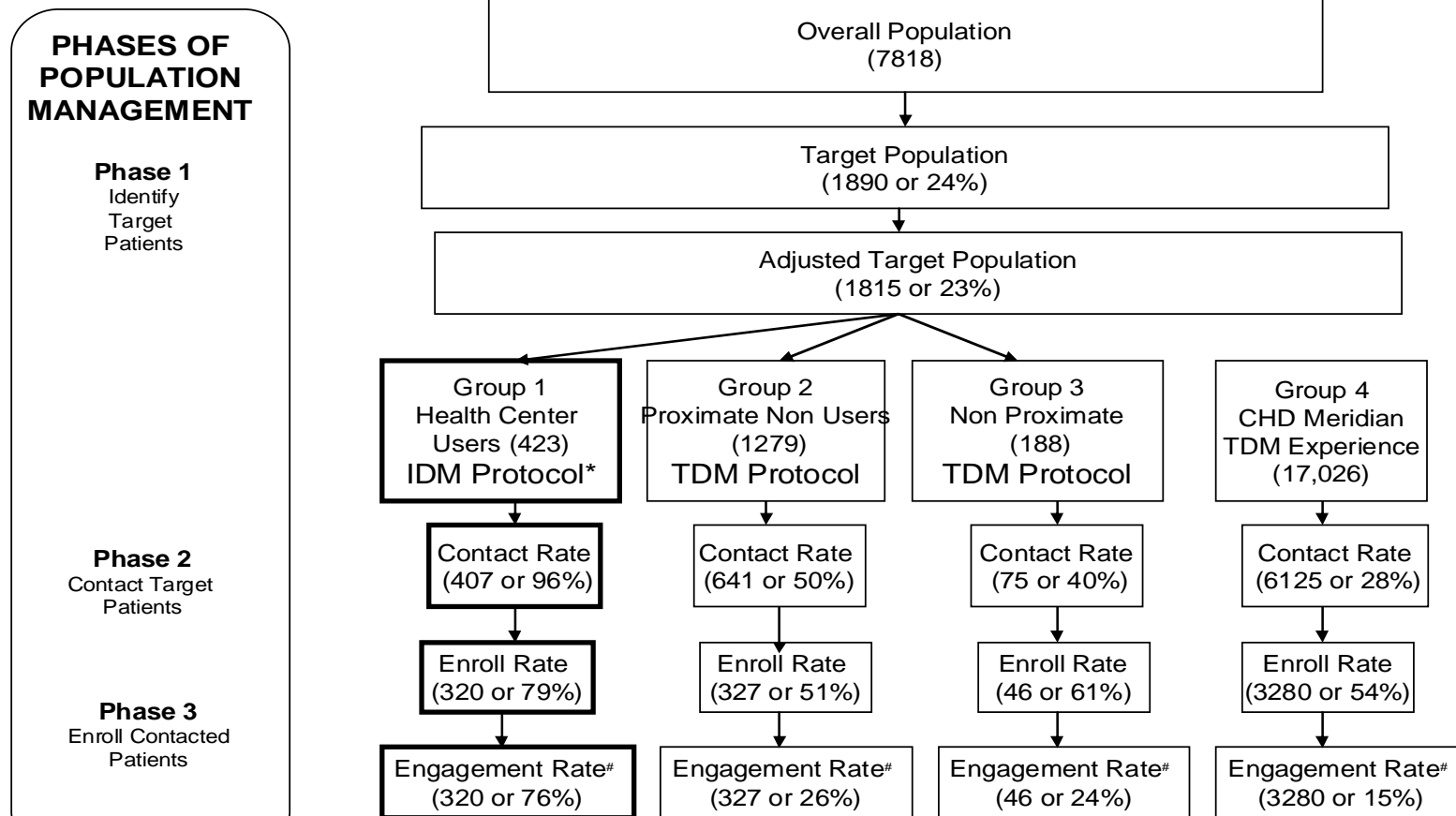
- Final Target Population: 1890 patients
 - 423 Health Center Users
 - 1279 Proximate Non-Users
 - 188 Non-Proximate

Figure II: Protocol For the Selection of the Target Patient Population



Process Metrics

Figure III: Evaluation of Process Metrics for Cohorts

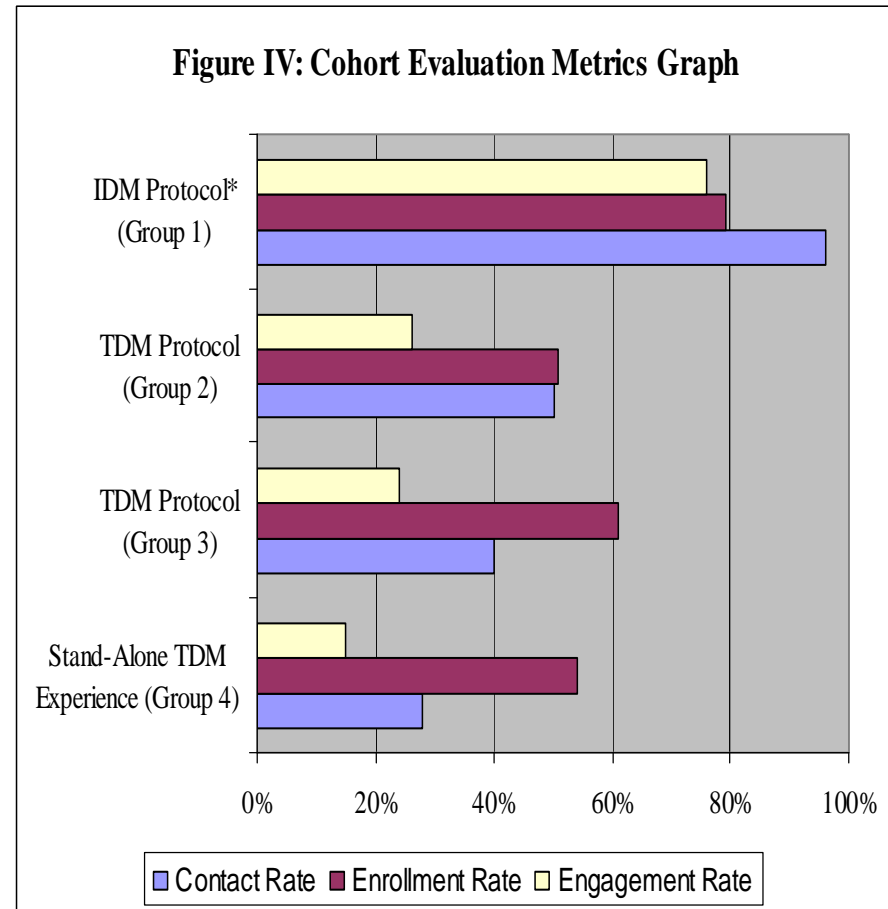


*Pat. Pend

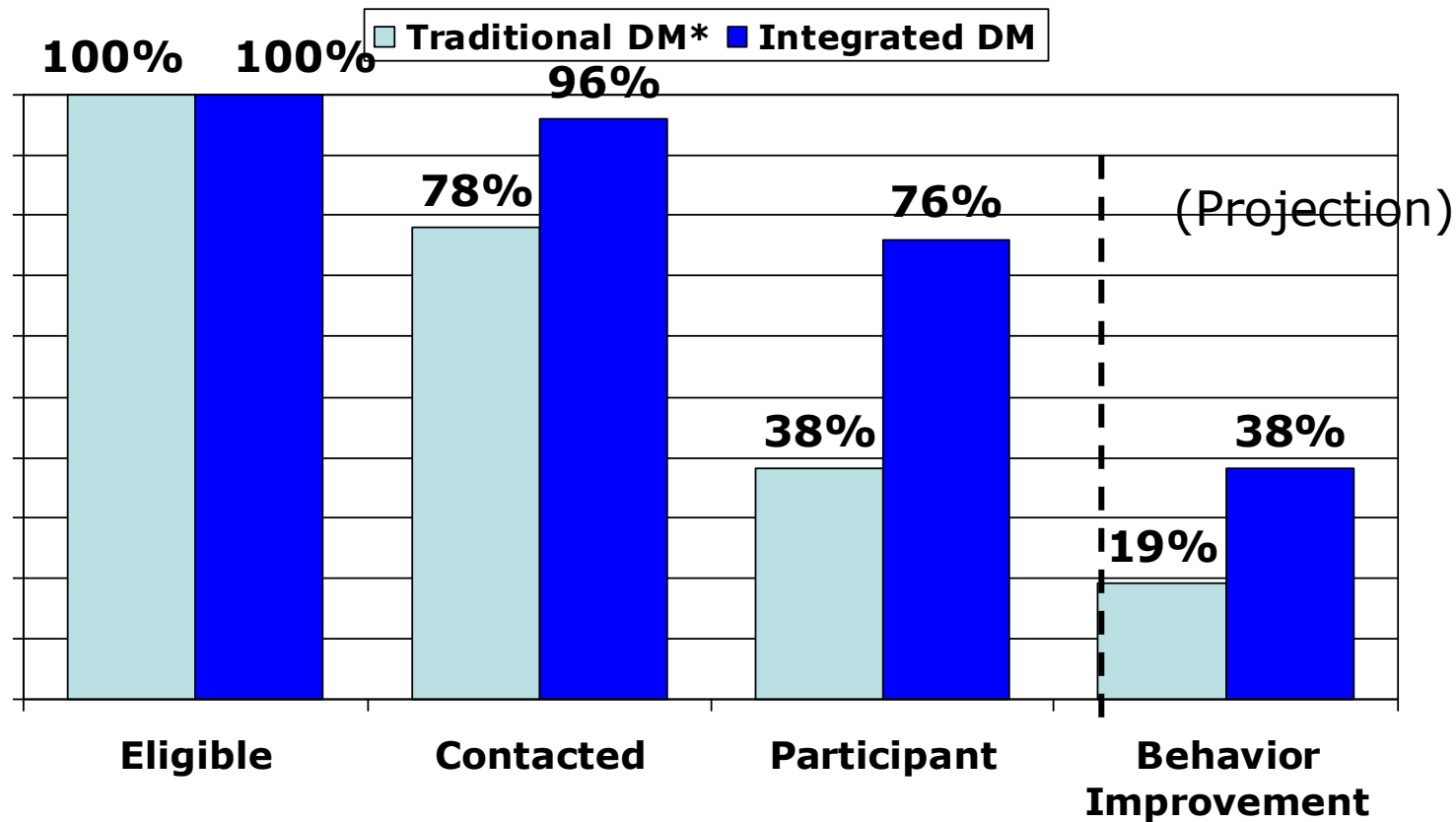
#Engagement Rate = Contact Rate x Enrollment Rate

Enrollment Rate Summary

- **Engagement Rate = Contact rate x Enrolled Rate**
- **Overall:**
 - Contact rate 62% of adjusted target population
 - 62% of those contacted agreed to participate (enrolled)
 - Overall engagement rate=38% which is a 153% increase over past CHD TDM experience of 15%
- **IDM Group:**
 - Engagement rate 5 TIMES greater than traditional TDM experience and 3 times greater than engagement rates for Groups 2 and 3



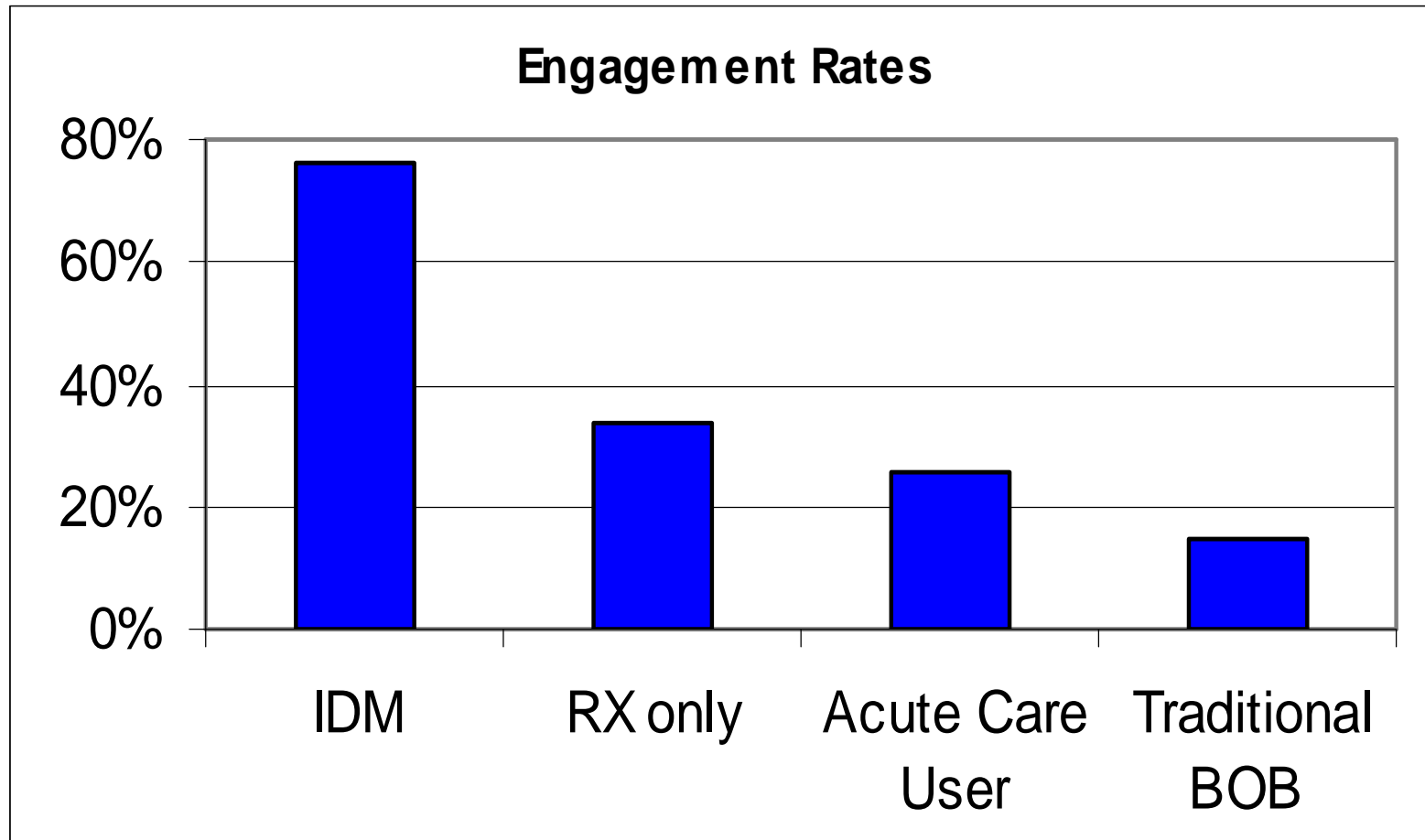
The Power is in the Integration: Workplace Health Center Drives Improved DM Engagement Rates¹



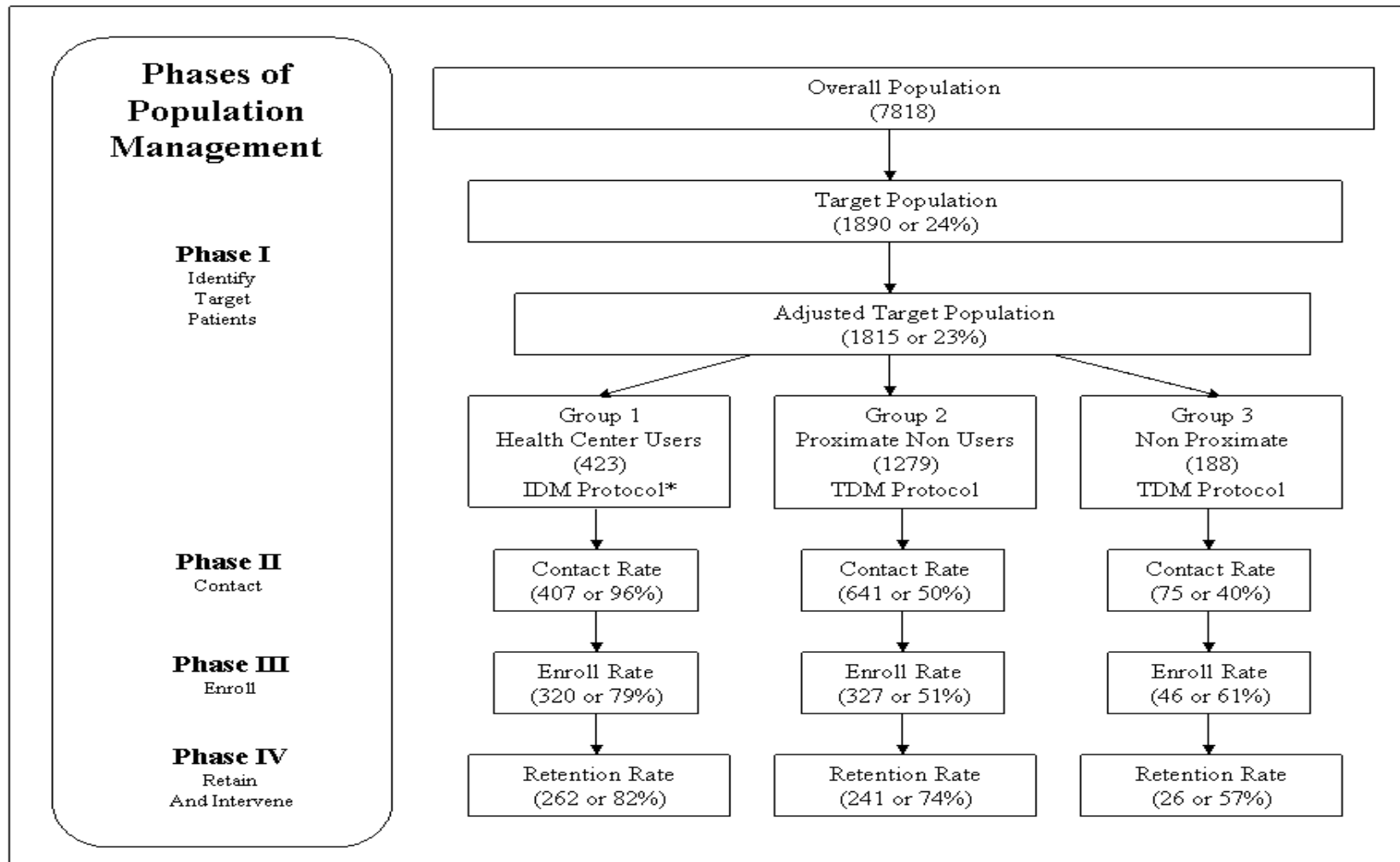
* Lynch et al. Documenting Participation in a DM Program. JOEM 2006; 48(5)

¹ Frazee et al. Leveraging the Trusted Clinician: Documenting Disease Management Program Enrollment. Disease Mgmt 2007; 10:16-29

Engagement Level Correlates to Depth of Relationship



Extended Process Metrics



IDM Study Population vs. Published Benchmark

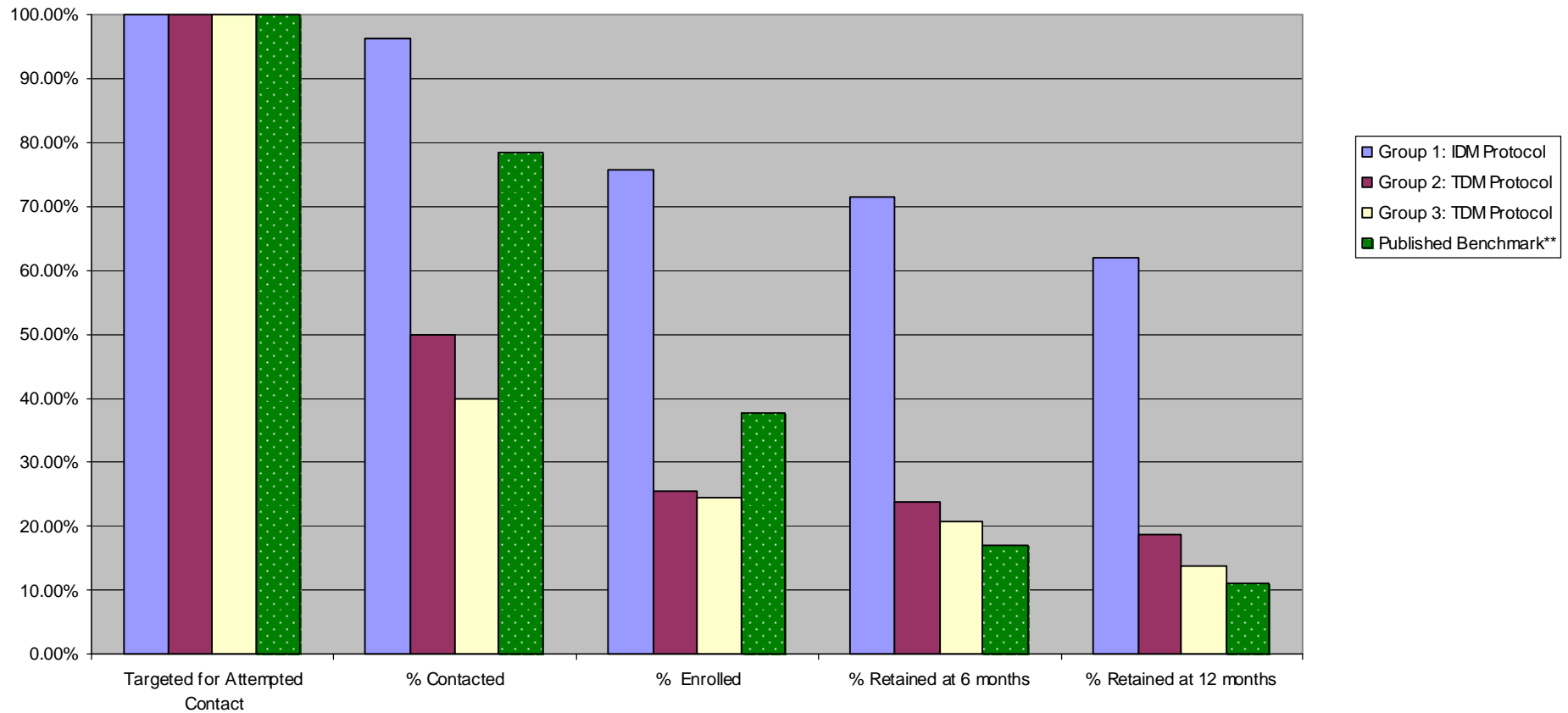
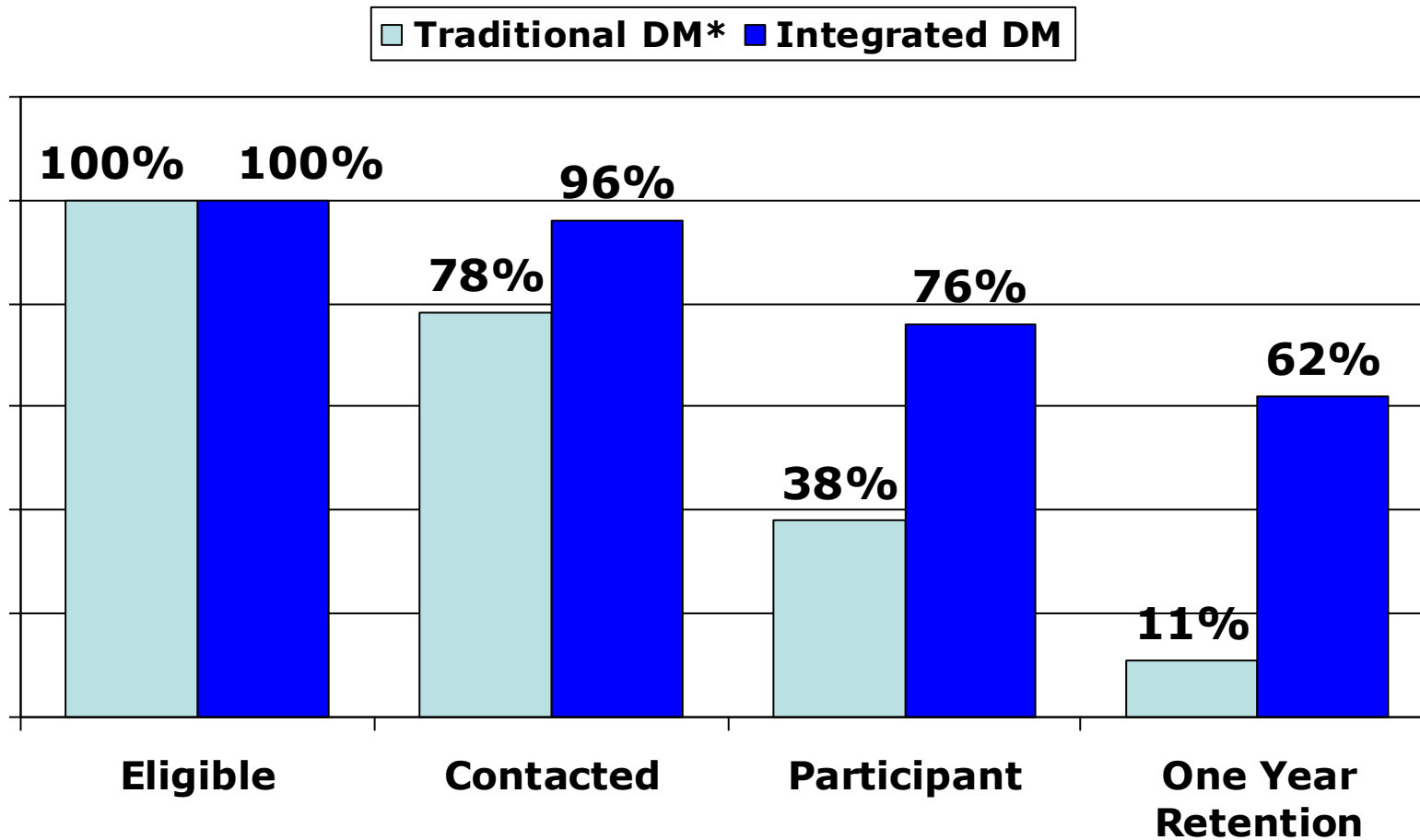


FIG 3. IDM Study Population versus Published Benchmark

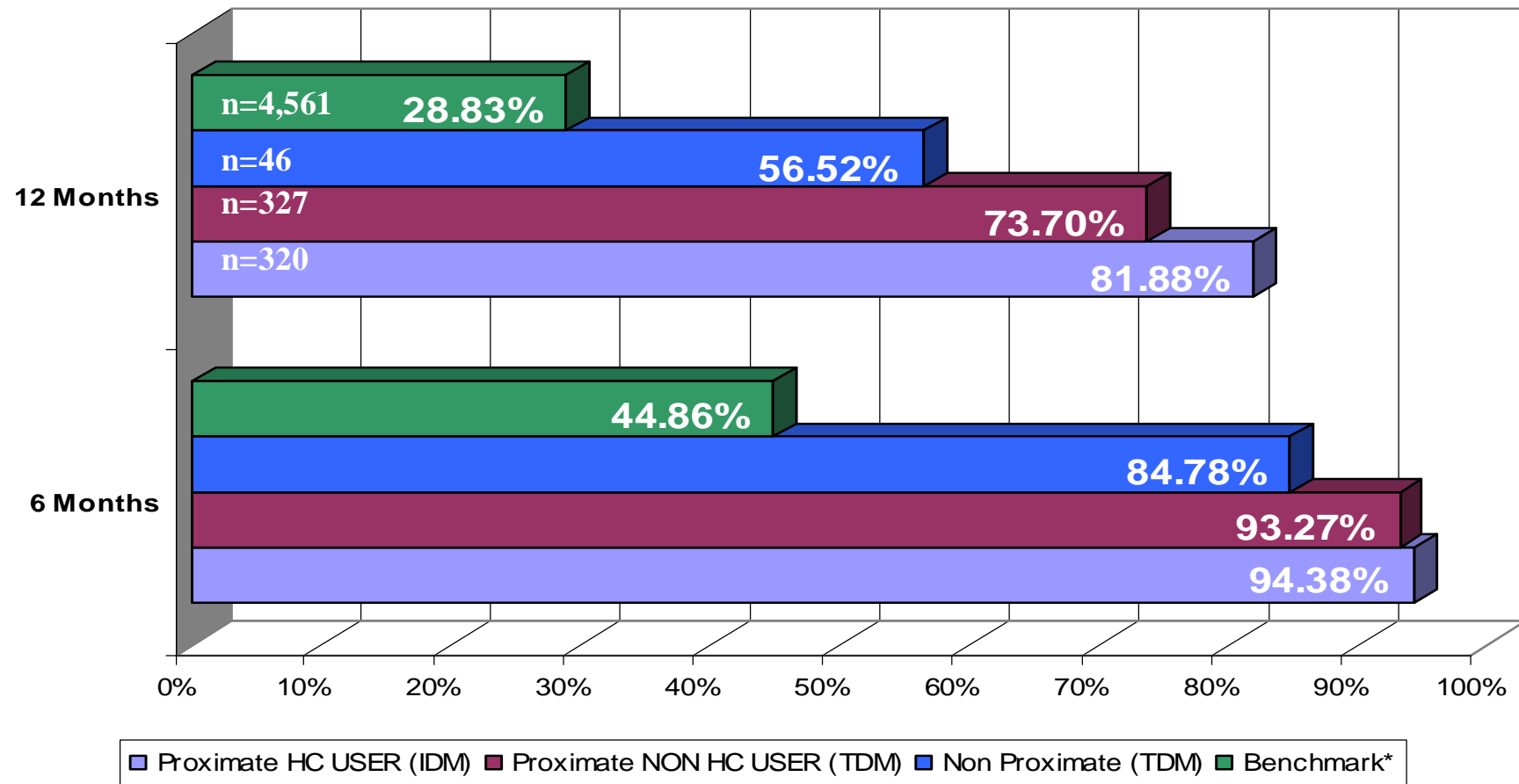
**Lynch WD, Chen CY, Bender J, Edington DW. Documenting Participation in an Employer-Sponsored Disease Management Program: Selection, Exclusion, Attrition, and Active Engagement as Possible Metrics. J Occup Environ Med 2006;48:447-454.

The Power is in the Integration: Workplace Health Center Drives Improved DM Engagement & Retention Rates



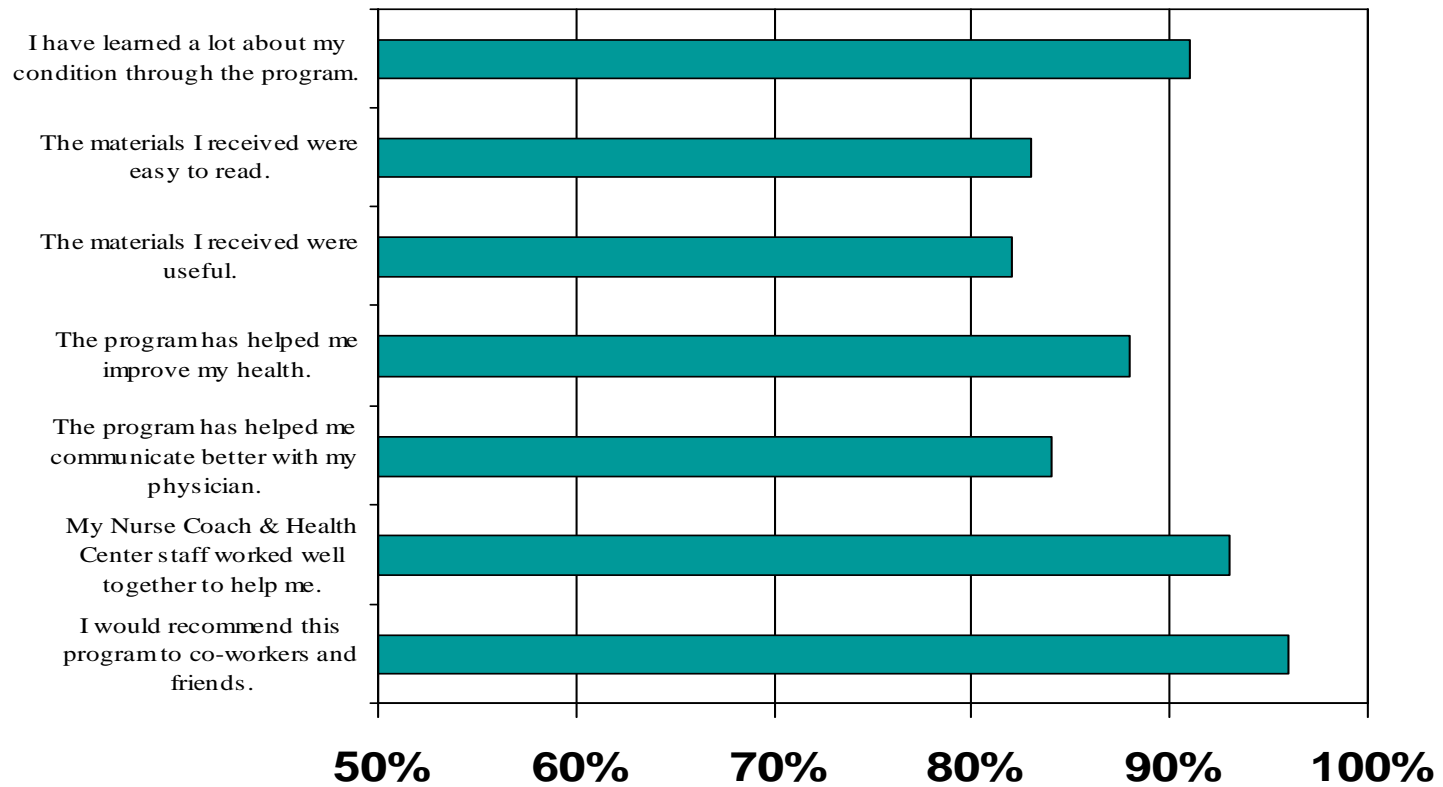
* Lynch et al. Documenting Participation in a DM Program. JOEM 2006; 48(5)

Enrollee Retention Rates correlate to the depth of the relationship with the workplace health center (n=693)



* Lynch et al. Documenting Participation in a DM Program. JOEM 2006; 48(5)

Patient Feedback: Results of Program Satisfaction Survey



“Talking to the nurse is like therapy. Always has an encouraging word..”

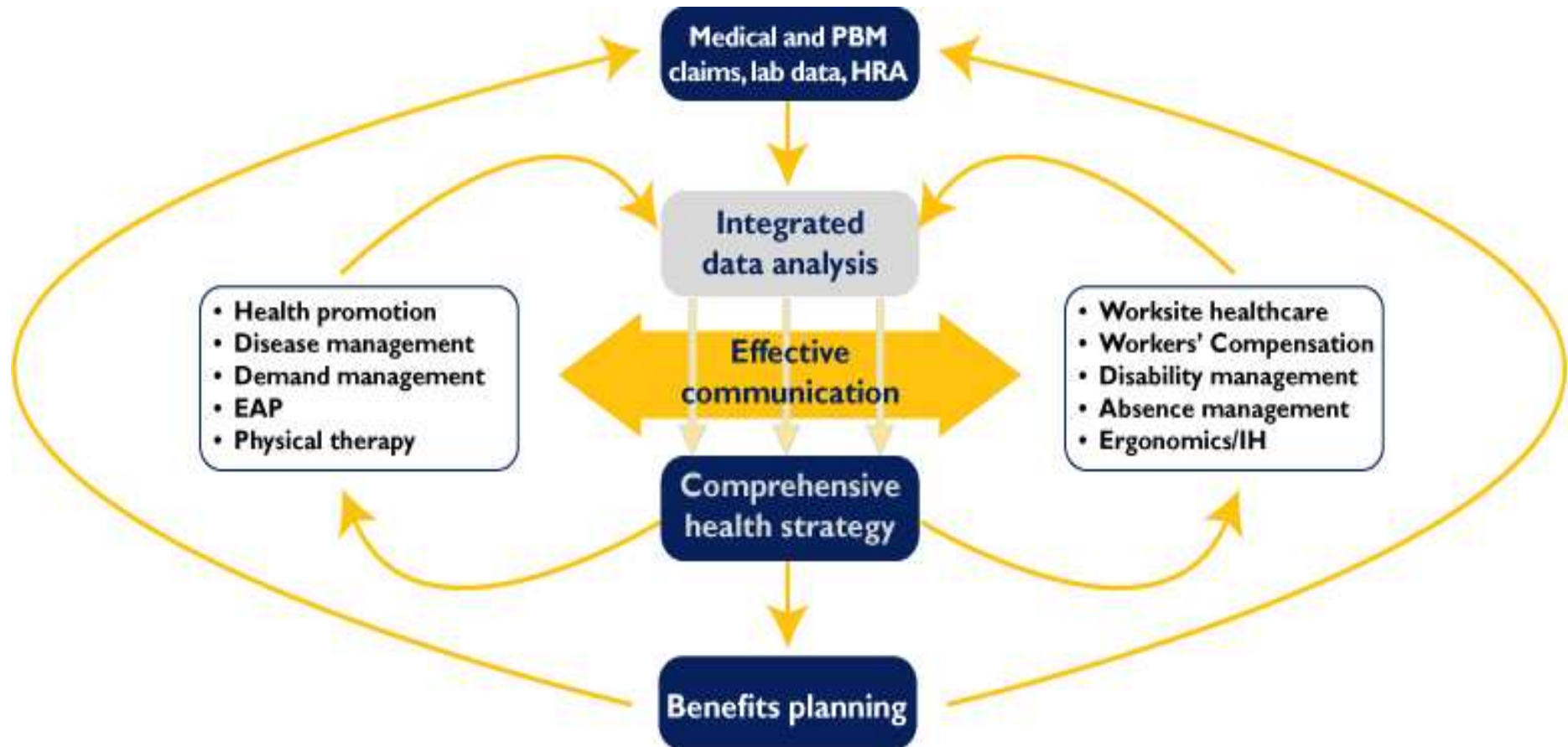
Key Findings from IDM Pilot study

1. IDM contact AND enrollment rates GREATLY exceed traditional/telephonic-only programs
2. Both physicians AND pharmacists are viewed as the “trusted clinician” and influence engagement
3. Enrollment rates are directly related to the amount of health center interaction; more interaction = higher enrollment success
4. Enrollment rates of Non-Proximate group similar to traditional/telephonic only programs
5. Overall Engagement Rate (Contact x Enrollment) assumptions were met
6. Retention rates 2.4 times higher for IDM than TDM and 4.6 time higher than published benchmarks
7. When the cumulative effects of higher engagement and retention are taken into account, IDM results in a four to six fold greater long-term participation rate

Workplace health management strategy development: similar to medical home strategy

- Transition from cost-based to value-based approach
- Engagement of interdisciplinary team
- Integration of health and business strategies

A vision of integration at the workplace medical home



Future integration opportunities

- Health care consumerism
- Health advocacy
- High performance networks
- EMR / Personal health record
- Fitness and nutrition
- Behavioral health
- Dental health
- Work-Life Balance

Employers can encourage the medical home

- **Benefit design**
 - Create a stable network of primary care providers including family physicians, general practitioners, and nurse practitioners
 - Providing workplace health centers is an excellent way to ensure quality, accessible, primary care for employees and their families
 - Provide and pay for services that support primary care providers such as disease management, case management, health coaches, and nutritionists
- **Education and Communication**
 - Provide information to employees about the importance of primary care, chronic care management and continuity of care
- **Rewards**
 - Provide incentives to employees who engage in activities conducive to good health and appropriate, continuous medical care such as having a PCP, participation in DM services, wellness and preventative activities

In Summary

- The Trusted Clinician at the workplace is a key member of the health care team
- While individual health-related programs may provide benefit, integration maximizes value
- Trusted Clinicians can facilitate integration of health benefits programs to optimize use
- Workplace healthcare can generate significant value for employers

Questions?