ABSTRACT: 2013 ELAM Institutional Action Project Poster Symposium

Project Title:
Why Education Must Change: What We Need to Know about the Changing Clinical Context
Name and Institution:
Monica L. Lypson, MD MHPE FACP, University of Michigan Medical School
Collaborators/Mentors:
James O. Woolliscroft, MD, Dean and Lyle C. Roll Professor of Medicine & David A. Spahlinger, MD, Sr. Associate Dean for Clinical Affairs, Executive Director of the Faculty Group Practice, Associate Professor
Background, Challenge or Opportunity:
Despite technological advances health systems worldwide continue to struggle to meet the health care needs of society (Frenk, Lancet 2010:376). In the United States the ability to deliver health care has been constantly challenged by rising medical costs and the increasing aging population (*www.kff.org*). In order to address this challenge the underlying paradigm of the health professional education in general, and medical education in particular, must change in response to these external pressures. The medical community is obligated by their social contract to deliver care that is patient-centered, even within an evolving economically and structurally changing health care environment. Unfortunately too few medical education faculty are aware of the complex external environment as well as the key drivers for educational change (Cooke, 2010).
Purpose/Objectives:
This project was undertaken to improve faculty's understanding of the external pressures on education.
- Create & disseminate an educational info-graphic at the institution's major educational & clinical committees
- Further develop the tool to disseminate at a national level through peer-review
- Study the impact that the info-graphic has on faculty attitudes toward educational change
Methods/Approach:
We used an info-graphic to communicate complex information in an accessible way that will be shared and disseminated to others. This project utilized interviews with key stakeholder as a means of identifying the external forces involved in the changing clinical environment. The interviews allowed the authors to develop a mental framework & knowledge map. Key informants, including the mentors above, as well as other educational, clinical and financial leaders were asked to discuss the degree of change needed and the key information deficit found when interacting with the "rank & file" faculty. A narrative literature review was conducted and provides the evidence for the information provided.
Outcomes/Preliminary Results: *Areas to consider:*
- Current Cost of Healthcare
- The Burden of Chronic Disease
- Need to address quality improvement & patient safety education
- Increasing diversity and advancing age of the patient population
- Inter-professional team needed to provide care
- The system, providers' scope of practice & care will change across all health professions
- Accountable care organization are just one step on the way to reform
- The patient will be the loci of control
- Improvements in Health will ultimately be seen when attention is given to the social determinates of health and disease
- Academic Medicine must play a key role

Key informants interviews resulted in agreement that the ability to digest complex concepts in to visual representations is appealing. There are verbal agreements for the presentation of the information at various committees' within the health system. The time and care spent to ensure a high quality graphic design will enable future national dissemination.

Why Education Must Change:
What Educators Need to Know about the Changing Clinical Context

Monica L. Lypson MD, MHPE[1,2,3], Assistant Dean for Graduate Medical Education, Associate Professor
James O. Woolliscroft, MD[1,2,3] Dean & Lyle C. Roll Professor of Medicine,
David A Spahlinger, MD[1,2]. Sr. Associate Dean for Clinical Affairs, Executive Director of the Faculty Group Practice, Associate Professor
Medical School Administration[1], Departments of Internal Medicine[2] & Medical Education[3], University of Michigan, Ann Arbor, MI, USA
Presented at the 2013 ELAM® Leaders Forum, Philadelphia, PA, USA

University of Michigan Medical School

WHY EDUCATION MUST CHANGE
What Educators Need to Know About the Changing Clinical Context

University of Michigan Medical School

HEALTHCARE'S ECONOMIC BURDEN [1,2]
% OF GDP 2009
MEDICAL 18%
MEDICAL 20% BY 2020
ALL OTHER
DEFENSE

CHRONIC DISEASE'S BURDEN [3]
BY 2020
PROJECTED CENSUS ~322M
CHRONIC ILLNESS ~157 M

LIMITED RESPONSE
ADDRESSING QUALITY IMPROVEMENTS AND PATIENT SAFETY [4,5]

INCREASING DIVERSITY [6,7]
OF POPULATION

INTERPROFESSIONAL CARE
IN ORIENTATION TO THE PATIENT [8]

CHANGE ACROSS ALL PROFESSIONS [9, 10, 18]
CARE PROVIDED AND THE TEAMS THAT DO SO MUST ADAPT

HEALTHY — DISEASED

Prevention and Health Maintenance
Community/RN-Led Teams

Single Chronic Disease Management
PharmD/APRN-Led Teams

Acute Disease Diagnosis and Treatment
Physician/Proceduralist-Led Teams

Complicated/Complex Multimorbidity Disease Management
Diagnosticians/Complex Care Teams

ACCOUNTABLE CARE ORGANIZATIONS REFORM [11, 12, 13]
NURSE
Clinic
Hospital
PHYSICIAN
PATIENT
PT
Bending the Cost Curve
COORDINATION
Quality and Safety

STEP ONE – ACO
STEP TWO – ???

LOCI OF CONTROL
WILL BE CENTERED ON THE PATIENT [14,15]

90% Self-Supported Care— With Behavioral Modifications

10% Healthcare System— Office Visits/Hospitalizations

ACADEMIC MEDICINE
KEY IN THE TRANSFORMATION [17]

1 IN 8 PHYSICIANS NATIONWIDE
teaches, conducts research, or cares for patients as a full-time faculty member at a U.S. medical school

SOCIAL DETERMINANTS THE KEY TO BETTER HEALTH [16]
Socioeconomic, Cultural, and Environmental Conditions
Education | Unemployment Poverty/Income | Housing | Work Environment & Exposures | Living and Environmental Conditions | Diet/Food Production | Bias | Healthcare System
Social and Community Networks
Individual Lifestyle Factors

Information presented by:
Monica L. Lypson, MD MHPE
James O. Woolliscroft, MD
David A. Spahlinger, MD

NARRATIVE REVIEW

OBJECTIVES:
Improve faculty's understanding of the external pressures on education:
- Create an educational info-graphic
- Disseminate thru peer-review
- Study the impact of the infographic

METHODS/APPROACH:
- Interviews with key stakeholder
- Develop a mental framework & knowledge map
- A narrative literature review

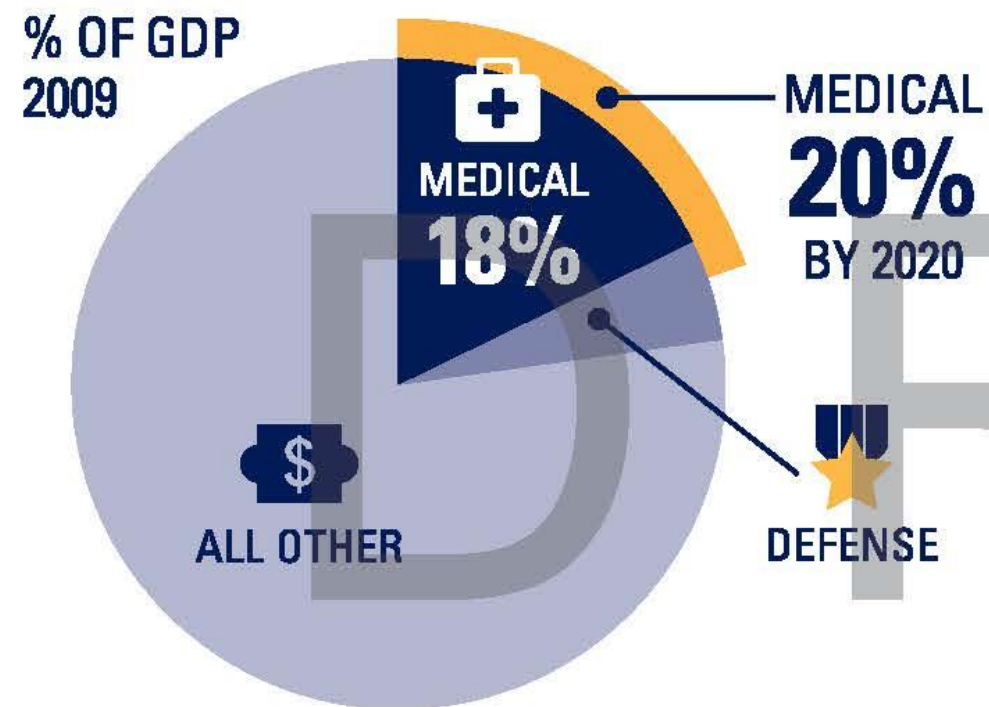### OUTCOMES/ PRELIMINARY RESULTS:
- Info-graphs/Pictographs aid in Understanding Complex Concepts
- Presentation to Nat'l Stakeholders:
  - George E. Thibault, MD President of the Josiah Macy Jr. Foundation
  - Eric Holmboe, MD, Chief Medical Officer /Sr. V. President of the American Board of Internal Medicine
  - Ora H. Pescovitz, MD, Executive Vice President of Medical Affairs, University of Michigan Health System

- Presentation to Local Stakeholders Planned:
  - Curriculum Policy Committee UMMS
  - Graduate Medical Education Committee
  - Component and Assistant Component Directors Committee
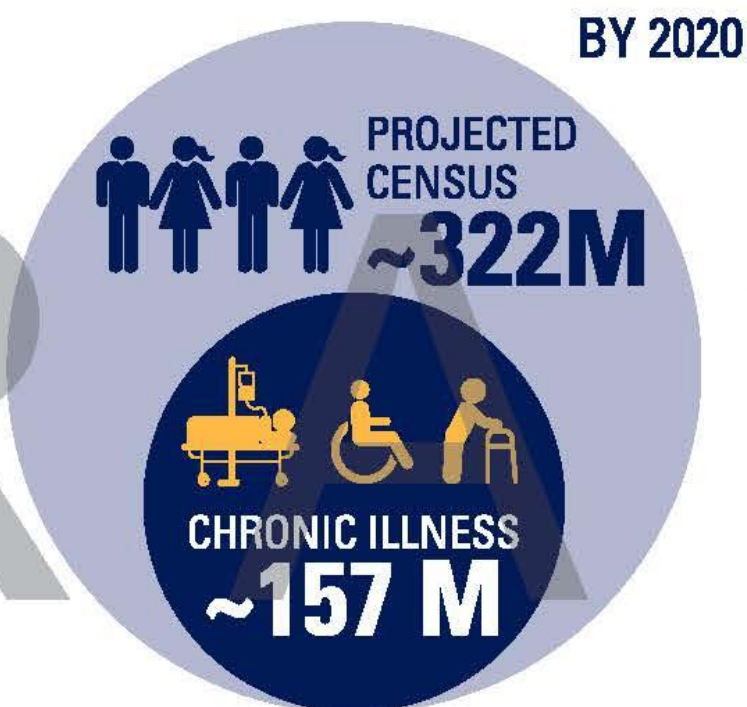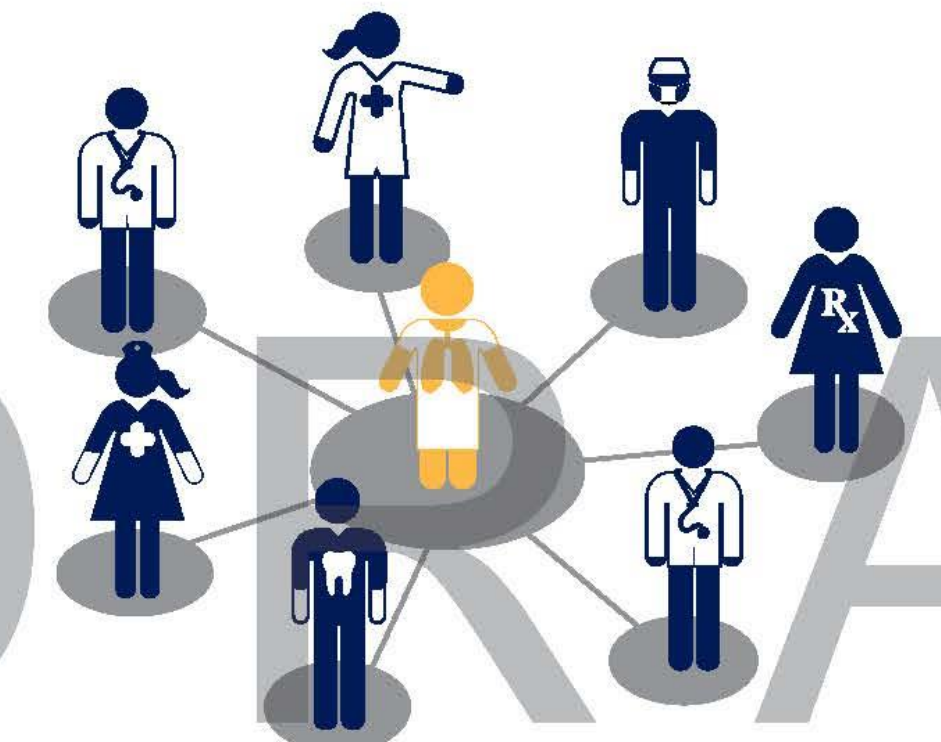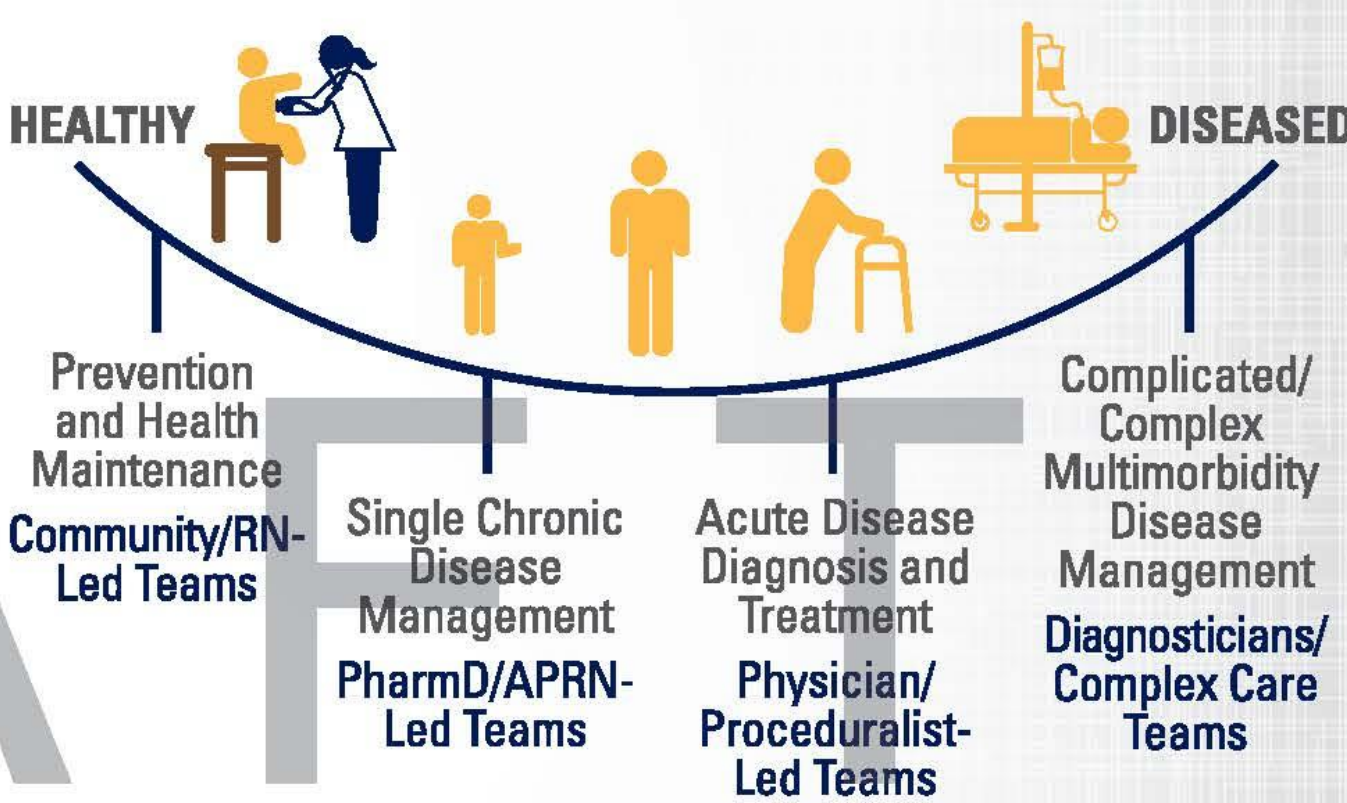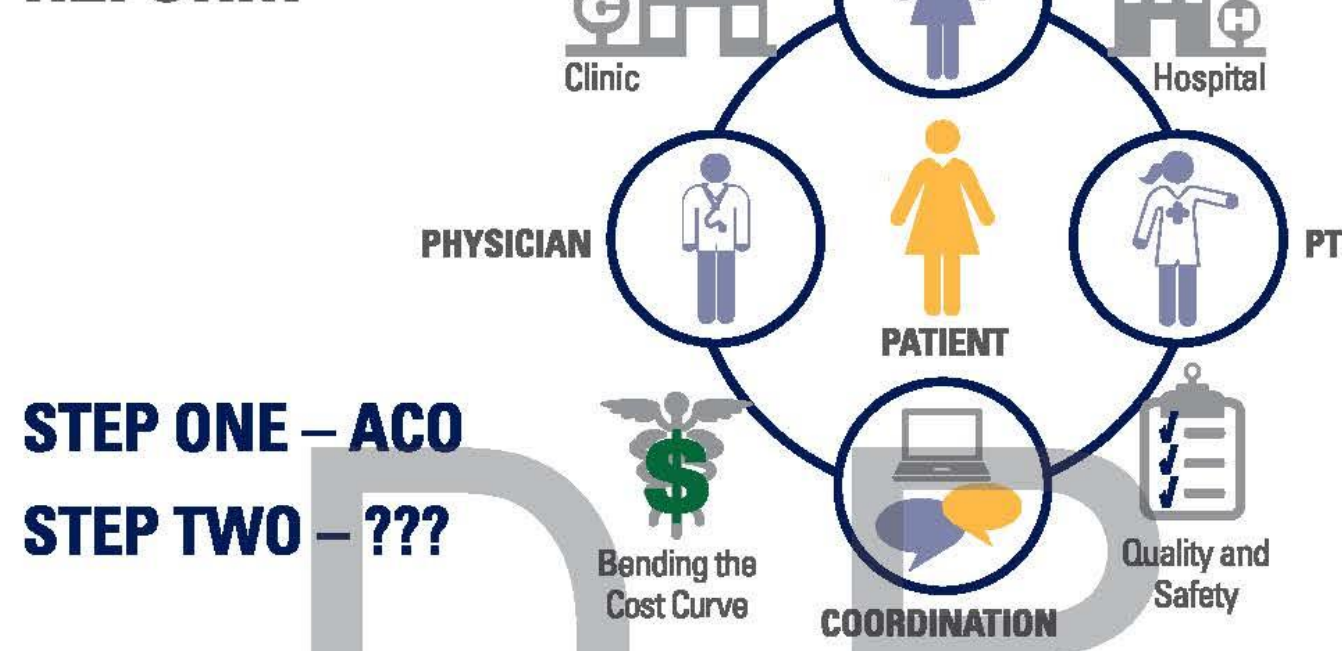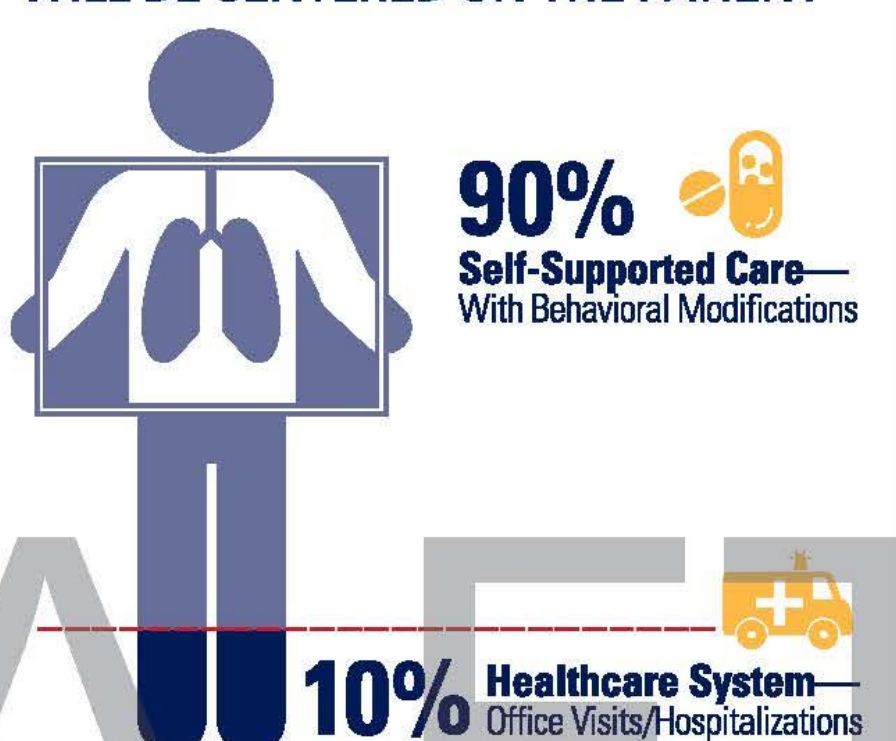 - F/U with ELAM interviewees

- Submission Plans:
  - JAMA/NEJM/Acad. Med

- Consider a Research Question:
  - What is the impact of the graphic on curriculum and educational change?
  - Focus Groups?
  - Survey Pre-Post?
  - Do we need to answer this empirically?

University of Michigan Medical School

DREXEL UNIVERSITY
Executive Leadership in Academic Medicine
College of Medicine

---

1. "Country statistical profile: United States", Country statistical profiles: Key tables from OECD. OECD (2013), doi: 10.1787/csp-usa-table-2013-1-en. http://www.oecd-ilibrary.org/economics/country-statistical-profile-united-states_20752288-table-usa (Accessed April 2, 2013)
2. Center for U.S. Health System Reform McKinsey & Company. Accounting for the cost of U.S. health care: Pre-reform trends and the impact of the recession. (2011) http://healthreform.mckinsey.com/insights/latest_thinking/accounting_for_the_cost_of_us_health_care (Accessed April 2, 2013)
3. Bodenheimer T, Chen E, Bennett HD. Confronting The Growing Burden Of Chronic Disease: Can The U.S. Health Care Workforce Do The Job? Can the US Health care Workforce DO the Job? Health Aff January/February 2009 vol. 28 no. 1 64-74
4. Wachter RM, Pronovost P, Shekelle, P. Strategies to Improve Patient Safety: The Evidence Base Matures. Ann Intern Med. 5 March 2013;158(5_Part_1):350-352
5. Kohn LT, Corrigan JM, Donaldson MS, eds. To Err is Human. Washington DC: National Academy Press, 1999
6. Overview of Race and Hispanic Origin: 2010 Census Briefs (2011). http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf. (Accessed April 2, 2013)
7. Bartels SJ, Naslund JA. The Underside of the Silver Tsunami — Older Adults and Mental Health Care. N Engl J Med 2013; 368:493-496
8. United States Department of Veteran Affairs. Patient Aligned Care Team (PACT). http://www.va.gov/primarycare/pact/ (Accessed April 2, 2013)
9. Woolliscroft, JO Dean, University of Michigan Medical School Personal Communication. (January, 2013)
10. American Hospital Association. Report: Workforce Roles in a Redesigned Primary Care Model. (2013). http://www.aha.org/content/13/13-0110-wf-primary-care.pdf (Accessed April 2, 2013)
11. Pescovitz OH. Medicine That Speaks. University of Michigan Health System. Accountable Care Organizations. http://www.medicinethatspeaks.org/?s=ACO (Accessed April 2, 2013)
12. Center for Medicare and Medicaid Innovation. Accountable Care Organizations: General Information. http://innovation.cms.gov/initiatives/aco/index.html (Accessed April 2, 2013)
13. Centers for Medicare and Medicaid Services. Accountable Care Organizations. http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/aco/ (Accessed April 2, 2013)
14. Economist Intelligence Unit: Never too early: Tackling Chronic Disease to extend healthy life years. Sponsored by Abbot (2012) http://digitalresearch.eiu.com/extending-healthy-life-years/report (Accessed April 2, 2013)
15. Bonomi, A. E., Wagner, E. H., Glasgow, R. E. and VonKorff, M. (2002), Assessment of Chronic Illness Care (ACIC): A Practical Tool to Measure Quality Improvement. Health Services Research, 37: 791–820. 16. World Health Organization. Social Determinants of Health. (2011) http://www.who.int/social_determinants/en/ (Accessed April 2, 2013)
17. Association of American Medical Colleges. American's Medical Schools and Teaching Hospitals. We Are the Future of Health Care. https://www.aamc.org/download/307492/data/futureofhealthcareinfographic (Accessed April 2, 2013)
18. Tinetti ME, Fried TR, Boyd CM. Designing Health Care for the Most Common Chronic Condition— Multimorbidity. JAMA. 2012;307(23):2493-2494. (Accessed April 8, 2013)