

References and Appendices Table of Contents

I. Table 1: Estimated Cost-Reductions for Proposal Components..... 2

II. Disease Prevention and Outpatient Practice Redesign 3

III. Health Information Technology..... 4

IV. Patient Safety Culture and Preventable Errors 4

V. Reducing Malpractice Costs 5

VI. Healthcare in Aging Population..... 6

VII. State Regulation in Quality and Prevention..... 7

VIII. Staffing Shortages..... 7

Colorado Foundation for Medical Care does not assume any responsibility for copyright protection laws if materials in this appendices are duplicated.

Table 1: Estimated Cost-Reductions for Proposal Components

Health Information Technology			
	Annual Average Cost to US Healthcare	Estimated Annual Cost to Colorado ('assuming 1.43% national average)	Cost savings per year (assuming a 50% reduction)
Health Information Technology (HIT, EMR, CPOE, etc.)	² \$94 billion	\$1.3 billion	\$672 million
Preventable quality measures in the hospital acute care setting (Institute for Healthcare Improvement, Centers for Medicare & Medicaid Services, JCAHO, NQF)			
	Annual Average Cost to US Healthcare	Estimated Annual Cost to Colorado ('assuming 1.43% national average)	Cost savings per year (assuming a 50% reduction)
Congestive Heart Failure	³ \$29.6 billion	\$423 million	\$211.6 million
Pressure Ulcers	⁴ \$11 billion	\$157.3 million	\$78.7 million
Adverse Drug Events	⁵ \$3.5 billion	\$50 million	\$25 million
Bloodstream Infections (CLI, VAP, MRSA)	⁶ \$5.5 billion	\$78.7 million	\$39 million
Surgical Site Infections	⁷ \$1.5 billion	\$21.5 million	\$10.7 million
Disease Prevention and Self-Management			
		Estimated Annual Cost to Colorado	Cost savings per year (assuming a 50% reduction)
Treatment of Heart Disease, Stroke and Diabetes		⁸ \$1.2 billion	\$600 million
Obesity-attributable healthcare costs		⁸ \$874 million	\$437 million
Tobacco screening and counseling savings	\$3 billion	⁹ \$42.9 million	\$21.5 million
Pneumococcal Immunization	\$50 million	¹⁰ \$715,000	\$357,500
Transparency and Disclosure Policies to Reduce Lawsuits			
Insurance malpractice payouts		¹¹ \$36 million	\$18 million
Total Estimated Savings			\$2.1 billion

¹National Average based on Colorado percent of national population (1.43%), and CFMC mortality project indicating Colorado represents 1.2% of national hospital beds.

²Bender, M., Mitwalli, A., & Kuiken, S. (2005)

³Thom, T., et al. (2006)

⁴Reddy, M., Gill, S., & Rochon, P. (2006)

⁵*Preventing medication errors. Report Brief.* (July 2006). Institute of Medicine

⁶*Hospital infections cost U.S. hospitals billions of dollars annually.* (2000) CDC press release

⁷*Many hospitals show gains fighting surgical infections.* (2005). American Health Quality Association.

⁸www.cdc.gov. Cost of CHF related hospital admissions to Colorado in 2001.

⁹*Preventing tobacco use.* (2005). Centers for Disease Control.

¹⁰*New study provides road map to preventive service.* (2006). Partnership for Prevention News Release.

¹¹Freed, J. (2003)

I. Disease Prevention and Outpatient Practice Redesign

- Aldana, S.G. (2001). Financial impact of health promotion programs: A comprehensive review of the literature. *American Journal of Health Promotion*, pp. 296-320.
- CEOs take on wellness as corporate strategy; rising costs of chronic diseases hurting corporate profits and productivity, finds PricewaterhouseCoopers. (2007).
PriceWaterhouseCoopers.
<http://www.pwc.com/extweb/ncpressrelease.nsf/docid/9DB255EB6BD9D8CF85257280006A618F>
- Chapman, L.S. (2003). Meta-evaluation of worksite health promotion economic return studies. *The Art of Health Promotion*, pp. 1-16.
- Enthoven, A., & Tollen, L. (2005). Competition in health care: It takes systems to pursue quality and efficiency. *Health Affairs*. Web Exclusive, pp. W5 420-433.
- Glasgow, R., Orleans, C., Wagner, E., et al. (2001). Does the chronic care model serve also as a template for improving prevention? *The Milbank Quarterly*, 79(4), 579-612.
- How's your health? Survey tool bringing patients and physicians onto the same page.* (n.d.) Institute for Healthcare Improvement.
<http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/ImprovementStories>.
- Kilo, C. (2005). Transforming care: Medical practice design and information technology. *Health Affairs*, 24(5), 1296-1301.
- Maciosek, M., Edwards, N., Coffield, A., Flottemesch, T., Nelson, W., Goodman, D., Solberg, L. (2006). Priorities among effective clinical preventive services methods. *American Journal of Preventive Medicine*, 31(1), 90-96.
- McQueen, M.P. (2006). The road to wellness is starting at the office; Employers' efforts to push preventive care begin to show both health and cost benefits. *Wall Street Journal*. (Eastern Edition), p. D-1.
- New study provides road map to preventive services with greatest health impact, best cost value. More than half of Americans who need valuable preventive services continue to go without them.* (2006). Partnership for Prevention News Release.
- Preventing tobacco use.* (2005). Centers for Disease Control.
<http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/pdf/tobacco.pdf>

Profiling the leading causes of death in the United States: Heart disease, stroke, and cancer in Colorado. (2003). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, pp. 1-4. <http://www.cdc.gov/nccdphp>

Promoting consumerism through responsible health care benefit design. (2006). National Business Coalition on Health. pp. 1-24.

Sidorov, J., Shull, R., Tomcavage, J., Girolami, S., Lawton, N., et. al. (2002). Does diabetes disease management save money and improve outcomes? *Diabetes Care*, 25(4), 684-689.

II. Health Information Technology

About CORHIO. (n.d.), Colorado Regional Health Information Organization, www.corhio.org.

Bender, M., Mitwalli, A., & Kuiken, S. (2005). What's holding back medical online data. McKinsey on IT. *Innovations in IT Management*, 6, pp. 2-8.

Conn, J. (2006). Personal and (maybe) confidential. *Modern Healthcare*. 36(27), pp. 28-32.

Health information technology leadership panel: Final report. (2005). The Lewan Group.

Preventing medication errors. Report Brief. (July 2006). Institute of Medicine of the National Academies. <http://www.iom.edu/CMS/3809/22526/35939/35943.aspx>

The promise of health information technology: Improving the quality and cost-effectiveness of patient care in Colorado. (2004). Colorado Health Institute. pp. 1-21. www.coloradohealthinstitute.org

Wagner, E., Austin, B., Coleman, C. (2006). It takes a region: Creating a framework to improve chronic disease care. California HealthCare Foundation. pp. 1-31.

III. Patient Safety Culture and Preventable Errors

Arthur, J. (2006). Lean six sigma simplified. *The Journal of Profits Through Process Innovation*. pp. 1-11.

Bailit, M. & Dyer, M. (2004). Beyond bankable dollars: Establishing a business case for improving health care. The Commonwealth Fund; Issue Brief September 2004. http://www.bailit-health.com/articles/TCF_beyond_bankable.pdf

- Going lean in health care.* (2005). Institute For Healthcare Improvement, Innovation Series 2005. pp. 1-24.
- Hospital infections cost U.S. billions of dollars annually.* (2000). Centers for Disease Control. <http://www.cdc.gov/od/oc/media/pressrel/r2k0306b.htm>
- Joint principles of a patient-centered medical home released by organizations representing more than 300,000 physicians.* (2007). Medical News Today. <http://www.medicalnewstoday.com/printerfriendlynews.php?newsid=65100>
- Many hospitals show gains fighting surgical infections. Study highlights need for all hospitals to address infection risk factors.* (2005). American Health Quality Association. http://www.ahqa.org/pub/media/159_678_5091.cfm
- McCarthy, D., & Blumenthal, D. (2006). Committed to safety. Ten case studies on reducing harm to patients. Commonwealth Fund Publication Number 923
- Measuring lean results in healthcare.* (n.d.). Lean Advisors, Inc. http://www.leanadvisors.com/Lean/Healthcare/articles/lean_healthcare_results.cfm
- Measures Monitor.* (2006). CMS Measures Management QIOSC, *Quarterly Newsletter.*
- Miller, M., & Zhan, C. (2004). Pediatric patient safety in hospitals: A national picture in 2000, *Pediatrics*, 113(6), 1-9.
- Reddy, M., Gill, S., & Rochon, P. (2006). Preventing pressure ulcers: A systematic review. *Journal of the American Medical Association*, 296, 974-984.
- Serena, G., (2007). Hospital and primary care docs need to talk. Too often, lines of communication break down, threatening patient safety, study finds. *HealthDay Reporter.* <http://www.healthfinder.gov/news/printnewsstory.asp?docID=602292>.
- Thom, T., et. al. (2006). Heart disease and stroke statistics: 2006 update. A report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Journal of the American Heart Association*, 113, 85-151.
- Weir, B. (2006). Doctor changes culture to improve odds for patients. ABC News. Online Edition. <http://abcnews.go.com/WNT/PrescriptionForChange/story?id=2578986&page=1>

IV. Reducing Malpractice Costs

- Apold, J., Daniels, T., & Sonneborn, M. (2006). Promoting collaboration and transparency in patient safety. *Joint Commission Journal on Quality and Patient Safety*, 32(12). 672-675.

- Eisenberg, D. (2005). When doctors say, "We're sorry". *Time Archive*. www.time.com.
- Freed, J. (2003). Congress should not limit rights of victims of medical malpractice. Press release, Office of Congresswoman Diana DeGette.
- Landra, L. (2007). Doctors learn to say "I'm sorry". *The Wall Street Journal*. p. D5.
- LeBlanc, B. (2004). Saying "I'm sorry" shouldn't be so hard. *SML Law Newsletters*. 5(8). www.sml-law.com.
- Sparkman, C. (2005). Legislating apology in the context of medical mistakes. *AORN Journal: Health Policy Issue*. www.aorn.org/Journal.
- Wojcieszak, D., Banja, J., & Houk, C. (2006). The Sorry Works! Coalition: Making the case for full disclosure. *Joint Commission Journal on Quality and Patient Safety*. 32(6), 344-350.

V. Healthcare in Aging Population

- Advancing the palliative and end-of-life care movement in Colorado*. (2004). The Planning Committee to Advance the Palliative and End-of Life Care Movement in Colorado. pp. 1-45.
- Federal interagency forum on aging-related Statistics. Older Americans 2000: Key indicators of well-being*. National Center for Health Statistics.
- Lynn, J. & Adamson, D. M. (2003). Adapting health care to serious chronic illness in old age. RAND Health White Paper WP. p. 137.
- National Quality Forum announces new report on framework and preferred practices for palliative and hospice care quality. (2002). *PR Newswire*. http://news.findlaw.com/scripts/printer_friendly.pl?page=/prnewswire/20070202/02feb20071356.html
- Waldo, D.R., Sonnefeld, S.T., McKusick, D.R., & Arnett, R.H. (1989). Health expenditures by age group. *Health Care Financing Review*, 10(4), 111-20.
- Teno, J., Lynn, J., Connors, A. F., Wenger, N., Phillips, R. S., Alzola, C., et al. (1997). The illusion of end-of-life resources savings with advance directives. SUPPORT Investigators. Study to understand prognoses and preferences for outcomes and risks of treatment. *Journal of the American Geriatrics Society*, 45, 513-518.

VI. State Regulation in Quality and Prevention

Government: Health care improves, but prevention remains missed opportunity. (2007). USA Today. Online version. http://www.usatoday.com/news/health/2007-01-11-prevention_x.htm

Health care price transparency. A strategic perspective for state government leaders. (2007). Deloitte Center for Health Solutions. pp. 1-22.

Kid's health care access: Diagnosis and prescription for improvement. (2007). Caring for Colorado Foundation, The Colorado Trust, and Rose Community Foundation. pp. 1-11.

Nation's leading physician groups join together to announce principles for reforming the U.S. health care system. (2007). Medical News Today. <http://www.medicalnewstoday.com/medicalnews.php?newsid=60822>

Trends alert. Costs of chronic diseases: What are states facing? (2006). A publication of the Council of State Governments.

Yondorf, B. (2004). Evidence-based medicine and state health policy. National Conference of Legislatures. pp. 1-21.

VII. Staffing Shortages

Keating, M. (2003). Not having enough nurses will drive up the cost of healthcare. *Expansion Management*. Online version. <http://www.expansionmanagement.com/smo/articleviewer/default.asp?cmd=articledetail&articleid=15768&st=5>