

# Health Services Transformation and Innovations Supporting the Current Chemical Agent Demilitarization Facility



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Assembled Chemical Weapons Alternatives

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A PARTNERSHIP FOR SAFE  
CHEMICAL WEAPONS DESTRUCTION

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# Transformation of Health Care and Services



## A Partnership for Safe Chemical Weapons Destruction

- Johnston Atoll Chemical Agent Disposal System
  - Emergency Medical Care
  - Urgent Care
  - Occupational Medical Surveillance
- Toole, Anniston, Umatilla Chemical Agent Disposal Facility
  - Toxic Chemical Training Course
  - Medical Planning (Most Probable Event and Maximal Credible Event)
  - Chemical Agent Exposure Algorithm and Laboratory Confirmation
  - Robust Monitoring Data and Clinical Findings
- Pueblo Chemical Agent-Destruction Pilot Plant and Blue Grass Chemical Agent-Destruction Pilot Plant
  - Medical Quality Assurance Program
  - Health Services aligned with National Standards
  - Employee Center Medical Home



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# Health Outcomes Impacting Chemical Agent Workforce



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According to the U.S. Department of  
Health & Human Services

**> 75%**

of all health care dollars are spent  
on chronic conditions,  
**most of which are preventable.**

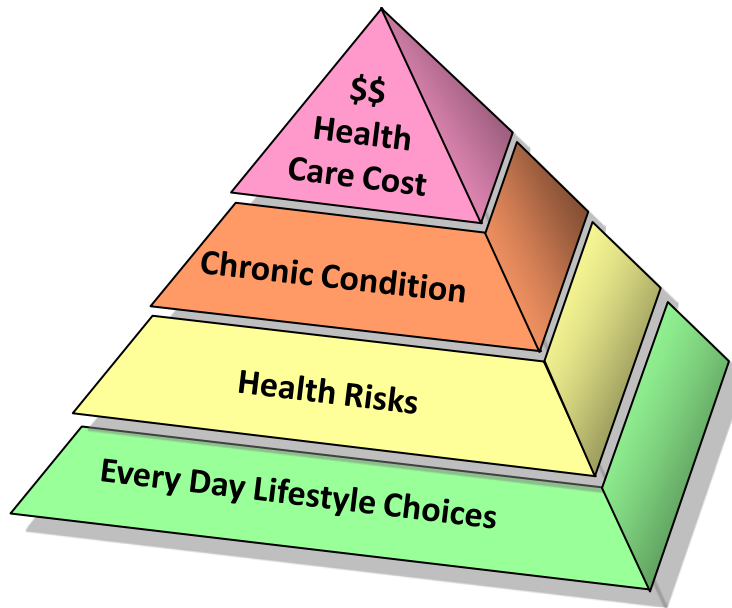


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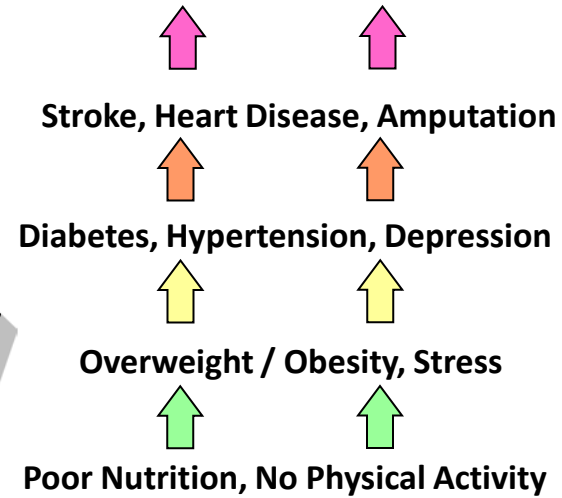
# Health Care Cost Pyramid



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**>75% of Health Care Costs**



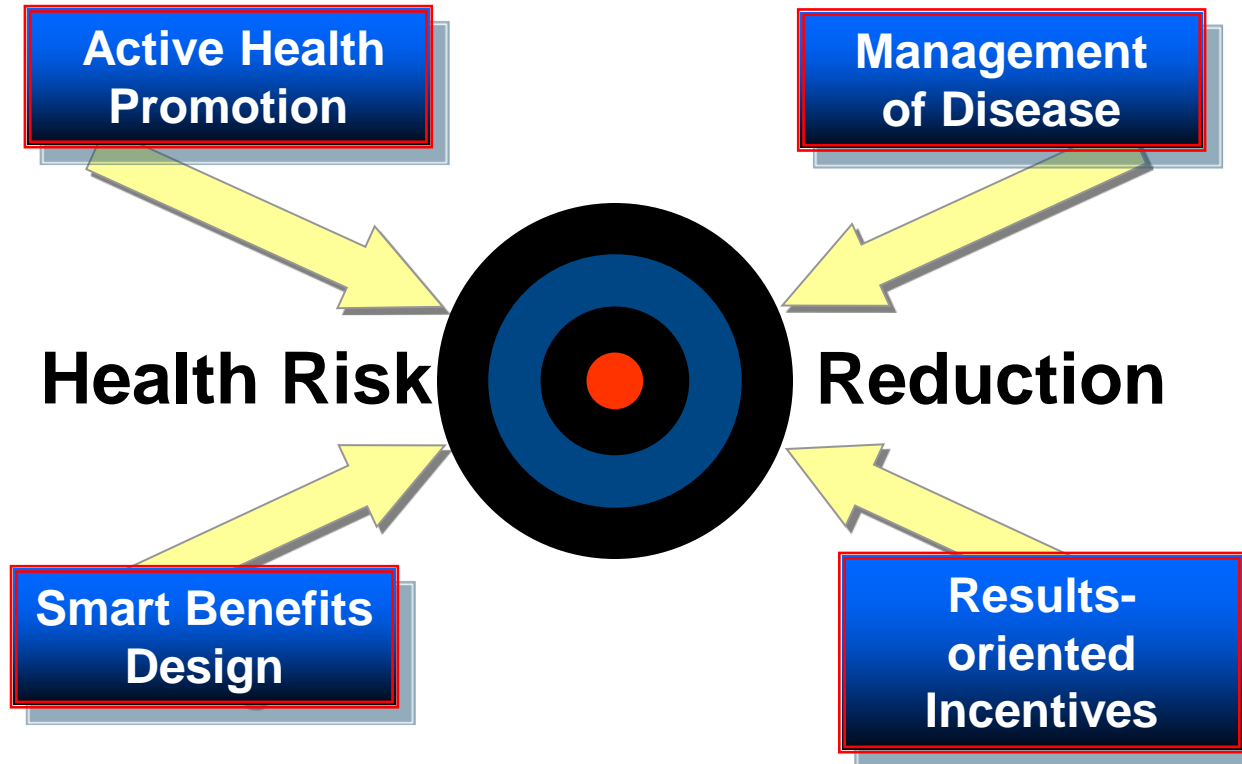


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# Strategic Health Care Management Approach



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# Model for Wellness and Prevention



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- Primary Prevention – Lifestyle Management
  - Healthy Eating
  - Regular Physical Activity
  - No smoking
  - Prevention Test/Exam
- Secondary Prevention- Early detection
  - Routine Health Screenings
  - Risk Reduction Education
  - Smoking Cessation
  - Health Awareness
- Tertiary Prevention- Care Management
  - Manage Chronic Medical Conditions
  - Personal Care Plan
  - Treatment Plan Adherence
  - Care Coordination



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# Program Executive Office Assembled Chemical Weapons Alternatives Wellness and Prevention Initiatives



## A Partnership for Safe Chemical Weapons Destruction

- Primary Prevention – Lifestyle Management
  - Ergonomic Program
  - Health and Wellness Contract
  - Wellness Newsletter
  - Flu vaccination
- Secondary Prevention- Early detection
  - Routine Health Screenings (BP, Glucose, Mental Health)
  - Biometrics Center
  - Smoking Cessation
- Tertiary Prevention- Care Management
  - Manage Chronic Medical Conditions
  - Personal Care Plan
  - Treatment Plan Adherence
  - Care Coordination



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# Total Impact of Improved Employee Health



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### Decrease in . .

- ↓ Health Care Costs
- ↓ Disability Costs
- ↓ Absenteeism
- ↓ Worksite Injuries
- ↓ Presenteeism
- ↓ Overtime / Temporary Staffing
- ↓ Turnover
- ↓ Workers' Comp Costs
- ↓ Medications / Rx Costs

### Increase in . . .

- ↑ Productivity  
(1.9% for each eliminated health risk)
- ↑ Employee Satisfaction
- ↑ Employee Outlook & Motivation
- ↑ Product Quality
- ↑ Mental Focus / Alertness  
(Situational Awareness)
- ↑ Creativity
- ↑ Employee Health





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# Health Technology and Smart Phones



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- Sleep Data
- Food/Fluid Intake Data
- Activity Data
- Blood Pressure Data
- Glucose Data
- Risk Profile Determination
- Heat Injury Risk
- Health Outcome Risk



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# Health & Productivity Studies



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**“High-risk participants had 3 times higher odds of filing a Worker Compensation claim, when compared with low-risk participants”**

Employee Health and Frequency of Workers' Compensation and Disability Claims

Kuhnen, Ann E.; Burch, Steven P.; Shenolikar, Rahul A.; Joy, Karen A.

Journal of Occupational & Environmental Medicine. 51(9):1041-1048, September 2009.

**“A strong association exists between the number of health risks and productivity loss ranging from 3.4% for those at lowest risk to 24.0% loss for those at risk for eight risks.”**

Use of a Normal Impairment Factor in Quantifying Avoidable Productivity Loss Because of Poor Health

Riedel, John E.; Grossmeier, Jessica; Haglund-Howieson, Laura; Buraglio, Cherie; Anderson, David R.; Terry,

Paul E. Journal of Occupational & Environmental Medicine. 51(3):283-295, March 2009.



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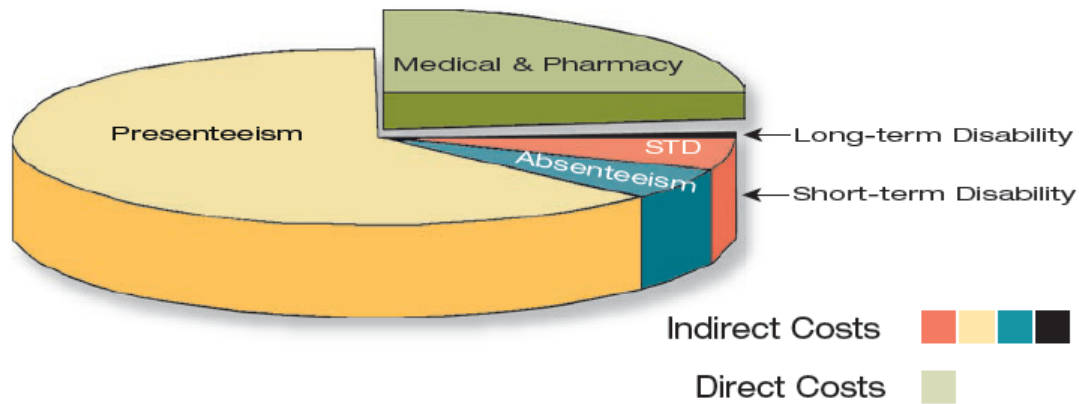
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# Indirect Productivity-Related Costs of Poor Health



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*Relative Contribution of Direct and Indirect Costs Within a Large Financial Services Corporation*



Source: Edington DW, Burton WN. Health and productivity. In: McCunney, RJ: *A Practical Approach to Occupational and Environmental Medicine*. Philadelphia: Lippincott Williams & Wilkins. Third edition. 2003:140-152.<sup>36</sup>



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# Questions?



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