Lessons from the Oil and Gas Industry to Improve Patient Safety

By

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Outline

• Oil & Gas industry: Safety
• WHO’s visit to Saudi ARAMCO.
• Safety Management System (SMS) in Saudi ARAMCO
Oil & Gas industry is complex / high risk

Drilling

Refinery
Oil & Gas industry is complex / high risk

Distribution
Oil & Gas industry is complex / high risk

- Minimize the carbon footprint
- Safeguard assets
- Improve oil well planning
- Maintain lean operations
- Streamline event and field management

- Predict reservoir performance
- Optimize the drilling configuration
- ‘Sense and respond’ to demand
- Improve the customer experience

- Ensure smooth pipeline operations
- Reduce maintenance costs
Oil & Gas industry is complex / high risk

All so you can avoid
The example of ARAMCO
ARAMCO is the world largest Oil and Gas Company, with over 60,000 employees (and nearby 350,000 employees when considering subcontractors).

ARAMCO’s safety figures have improved continuously from the 30’s with an even accelerated pace in recent years.
How did ARAMCO do it?

1. ARAMCO has selected five corporate and safety values: **Excellence, Safety, Accountability, Integrity, Citizenship**.

Safety values are not thought of in isolation from performance, but as part of the core business.
2. ARAMCO has turned into reality a sophisticated Safety Management System with a strong commitment to safety for executive.

The ARAMCO Safety Management System (SMS) covers 11 major topics:

Leadership and accountability,
Emergency preparedness,
Incident reporting and analysis,
Communications,
Competency and training,
Asset Integrity Safe operation,

Contractors, suppliers and others,
Risk assessment & Management,
Community Awareness & oil safety,
Continuous improvement
ARAMCO Safety Management System (SMS)

Corporate adherence to values are assessed periodically at the executive level by various institutional means:

- **Executive Safety Management Review (ESMR):** which are top management reviews, annual, at department level, look at statistics, and decisions,
- **Local safety programs LPCR (Loss Prevention Compliance Review) audit after implementation of SMS**
- **Health Security Safety and Environment Safety Corporate Committee:** high level strategies, continuous improvement, think about engagement of CEO and top management high level strategies related to Safety/ security
3. Dialogue among workers and managers are at the very core of maintaining values and effectiveness of the Safety Management System.

The opportunities to conduct a values dialogue are planned into each local setting:

- Opportunity 1: values moment
- Opportunity 2: Values test, training, scenarios,
- Opportunity 3: Values discussion
- Opportunity 4: Values Experience
- Opportunity 5: Values celebration, recognition++ of workers, photos of service recognition,
How did ARAMCO do it?

Risk Management Strategy

Reason’s "Swiss Cheese" Model

Summary

• Oil & Gas industry has effective safety practices.
• Saudi ARAMCO demonstrates excellence in safety.
• Leadership commitment & implementation of Risk Management strategies is one of the hallmarks of Oil & Gas industry’s practices.
• The Healthcare industry can learn a lot from other HRO industries like Oil & Gas.
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