# Medical Policy Formulation Process for ANARE Desmond Lugg MD School of Public Policy George Mason University/NASA

# Medical Policy Formulation - ANARE (2)

- Australia long tradition in Antarctica winterer 1899
- AAE 1911-14, BANZARE 1929-31
- Australian Antarctic Territory 1933
- ANARE established by Commonwealth Government 1947
  - Government agencies, universities, commercial firms
  - Antarctic Division established 1948 to organize and support ANARE
  - Annual population 70-100 winter, 500 summer
     [1,000 winterers at 36 stations, 4,000 summer, 14,000 tourists]
- Antarctic Treaty 1961 "no comment on medical matters"
   STAKEHOLDERS/BENEFICIARIES

Government, bureaucracy, taxpayers, universities, commercial firms, expeditioners

# Medical Policy Formulation ANARE (3)

#### MEDICAL POLICY MAKERS

- 1947 no medical group in Antarctic Division
- 1963 one doctor, 1979 two doctors, 1984 three doctors
- Minister/Director major input early years (ad hoc, political)
- Input from
  - Defense (WWII)
  - Territories (remote groups)
  - External Affairs (overseas appointments)
  - Health (pre departure for overseas)
- Head Polar Medicine initiated all policy from 1963 (mandated)
- Evolution of policy formulation over 56 years, still evolving
- AAT- laws of ACT (legal)
- NIOSH (Worksafe Australia) 1985, safety officer (regulatory)

# Medical Policy Formulation - ANARE (4)

#### Prophylactic Appendectomy

- 1948 Heard Island doctor considered all should have operation
- 1949 1 case in 23
- 1950 3 cases in 33 (Evacuation "Australia")
- 1951 1 case in 31
  - All doctors must have appendectomy (mandated)
  - BMA against, President had been in Antarctica on AAE 1911-1914
- 1970s evidence base from studies on polar regions (1961 Rogozov self-operation USSR implemented 2 doctor teams -)

#### **POLICY MAKERS**

Ad hoc (pragmatism, risk factors)

Mandated (medical)

Legal

Regulatory

**Political** 

# Medical Policy Formulation - ANARE (5)

#### **POLICIES**

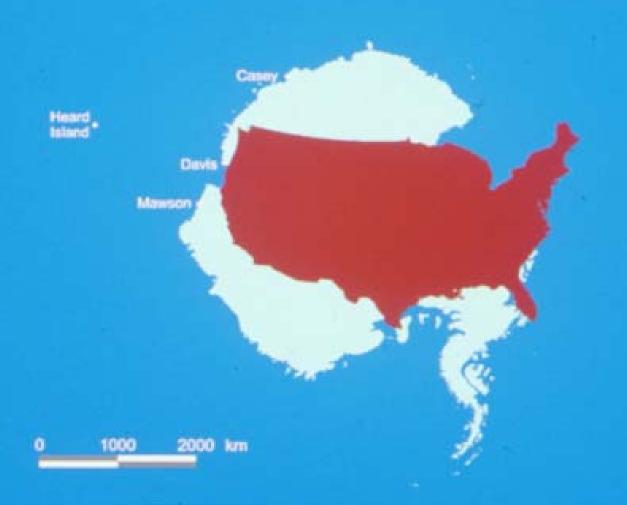
- Medical selection guidelines/standards
  - Work of doctor performed before departure (heroic era)
- "One doctor to each group" (political)
- "No doctor, no expedition" (political)
- Evacuation not first line management nor routine (political) (reinforced after 1954 total physical isolation)
- Psychological selection (Minister/Director)
- Skills of doctors (medical)
- Walking blood bank (medical)
- Pregnancy and management, abortions, sterilization (medical, legal)
- Dangerous drugs (legal)
- Medical indemnity, sexual misconduct (medical, legal)
- Resignation of doctor (medical)

# For Safety and Remote Medical Care Prevention First



# **ANARE Doctors Group Practice**





# Medical Policy Formulation - ANARE (7)

#### SAFETY AND HEALTH ISSUES

- ANARE health system based on preventive medicine, caring for individual's health with occupational medicine being cornerstone of system, with added emphasis on safety (not safety substituting for health)
- Total physical isolation for 9-12 months, no air transport
- Environmental problems (cold) not common indoctrination, preventable
- Technological risks high 2,500 chemicals, 800 hazardous

#### **HEALTH AND SAFETY**

Medicine: preventive

individual

occupational

Safety - closely related

# Medical Policy Formulation - ANARE (8)

#### EXPERIENCE/EVIDENCE-BASED RESEARCH

- Experience most important
- Strong nexus between medical practice and research
- Research has emphasis on studies facilitating safe and efficient living and working
- Health register quantified occurrences of illness/accidents, assesses temporal, seasonal and occupational trends
- Evidence based research strong influence on policy formulation EXPERIENCE/EVIDENCE-BASED
   BOTH INFLUENCE POLICY FORMULATION



# Medical Policy Formulation - ANARE (9)

#### **FACILITATORS**

- Doctors on staff, Head Polar Medicine mandated for policy
- Research program
- SCAR WGHB&M 1974 (International Council for Science)
- IUCH/Arctic

#### **OBSTACLES**

- In beginning, lack resources, infrastructure, organization
- Improved over last 20 years
- Medicine taken for granted
- Lay persons playing doctor
- Additional legislation and expectations that cannot be met
- pressure to overturn policies (financial, reduce standards, extension of Australia theory)

# Medical Policy Formulation - ANARE (10)

#### **EVALUATIONS**

- 19 Reviews of medicine in 30 years (external/internal)
- Bench marked against organizations "gold standard"
- Continuous (medical practice, pharmaceuticals, health register, policies)
- Success of policies (adverse publicity, court appearances, ombudsman?)

#### CONTINUOUS IMPROVEMENT

Training

Medical materiel

Systems - telemedicine

Policies, practices and procedures

Innovation

# Medical Policy Formulation - ANARE (11)

#### **DESIRED OUTCOMES**

- No loss of life, decreased morbidity, no negative effects of isolation
- Increased research output; both quality and quantity
- No adverse publicity
- No appearances in court, before enquiries or ombudsman
- Keep within budget

