How Rural is Rural?
Welcome to the Great Land
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Disclosures
• None referable to this talk
• Remote Operations
  • Medical Director SALA Remote Medics
  • Medical Director Fairweather, LLC
  • Medical Director Kenai Peninsula Borough EMS
  • Co-founder mobile consult platform

Objectives
• Review challenges of prehospital care in austere environment
• Review differences between rural and remote environments
• Review Alaska’s approach to the problems
• Review novel model to provide care in place with funding mechanism
What Does EMS Do?

- Transport of the sick and injured (we can't fix this here)
- Scene response
- Interhospital
- Transport due to lack of primary care access
- Societal trampoline
Anchorage
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What is the Standard?

- Standard of Care..or
- Care standard
- Standards are different for different providers and in different locations?
What Happens Next?

Anchorage
Alaska

- 663,228 sq mi
- Width 2261 mi
- Length 1420 mi
- Population 710, 231
With Rural and Remote...

Size Does Matter

Area 663,268 sq mi
Length 1420 mi
Width 2261 mi
Definitions

- Rural
- Super rural
- Remote

- Frontier: variable definitions including density, functional association with other areas, availability of paved roads

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What’s the difference between “Rural” and “Remote”?

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How much of Alaska is connected by roads?

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What is an Immersion Injury?

What is a Honey Bucket?
BTW: Do you ever call your sweetie “Honeybucket”?  

General description of sewage lagoon immersion:
- 3 yo playing w cousin on ice of sewage lagoon, fell through
- Extricated by adults and CPR started
- Medivac crew: child listless, unresponsive, low sats
- RSI: suctioned 100-150 of sewage from lungs
- Transported to small regional hospital

Sewage Lagoon Immersion (cont):
- Severe problems with compliance (surfactant washout?)
- Transferred with three crewmembers to Anchorage
- Oscillating ventilator
- Long hospital course with multi-organism pneumonia (8 different organisms)
- 1 month in hospital then discharged fully recovered
Sewage Lagoon Immersion: Follow up

- From the medic:

  "Three years later I was in Chefornak picking up that kid's 100 year old great grandmother, and a woman kept looking at me from across the room. It was the child's mother who thanked me for saving her son and introduced him to me again. It was one of those rare, gratifying moments as a caregiver when you are fortunate enough to meet your patient again."

Option: Different Viewpoint
Does Vast Roadlessness Matter?

Just Send a “Chopper”
Crew Member w "bad diabetes" on a foreign flagged vessel in Bering Sea

Different Tool
PJ Mission Bering Sea

PJs deploy RamZ from C130 and follow in with parachutes
Board the vessel via Jacob ladder

Findings?

Obvious Solutions Not Always Obvious
Health Care Facts

- 75% of Alaska Communities not reachable by road
- 24 acute care hospitals in AK
  - 14 with <50 beds
  - Anchorage and Matsu Valley 6 hospitals
Quiz

• I am a program that allows non-physician, non-PA, non-NP, non-RN:
  • Treat remote emergencies
  • Treat routine medical urgencies
  • Decrease hospital transfers
  • Provide care during transitions of care to avoid unnecessary returns to hospital

Quiz (cont)

• Without direct contact with physician I can
  • Treat with antibiotics
  • Treat with prescription pain medications
  • Dispense antibiotics
  • Give IV fluids
  • Give IM/SC injections in adults, infants, and children
Alaska Community Health Aide Program (CHAPS)

- Developed in response to tuberculosis outbreak in 1950's and 1960's as means of dispensing medications in remote Alaska
- Response to high infant mortality and high rates of injury in rural and remote Alaska
- 1968: formal, federally funded program by the Snyder Act
CHAP Alaska

- 550 Community Health Aides/Practitioners
- Located in 170 rural AK Villages
- Use 2006 guideline manual
- Established referral relationship
- Selected by their community
- Four 3-4 week training sessions with intercurrent clinical sessions in clinic
This book is written so that it can be used by all standing orders for a CAPW.

There are certain non-emergent problems that an experienced CAPW should be able to treat without contacting the referral doctor.

In the plan for such problems, there will be a statement such as: "Report to your referral doctor or walk-in clinic if the problem persists." If there is no referral doctor, refer to the nearest hospital emergency department.

Also, there are certain emergency problems that an experienced CAPW should be able to treat if unable to reach the referral doctor. In the plan for such problems, there will be a statement such as: "Take the patient to the nearest hospital emergency department." If there is no referral doctor, refer to the nearest hospital emergency department.

A regional form can be developed such that a referral doctor can sign off a CAPW for the whole region or for current patients of the manual.

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**Using Controlled Drugs**

Examples:

- **ACETAMINOPHEN** with **CODEINE** (Tylenol with Codeine)
- **ASPIRIN** with **CODEINE** (Empirin with Codeine, Ascodine®)
- **CHLORPHENIRAMINE** (Pyridium®)
- **CODEINE**
- **DIAZEPAM** (Valium®)
- **MEPERIDINE** (Demerol®)
- **MORPHINE**

These pain medicines and sedatives are prescription drugs that are often abused. They are called "controlled drugs" because:

- Their use is controlled by law.
- You must keep special records.

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**GIVING MEDICINE TO A PATIENT**

1. **Getting Started**

Give medicine with care. Use the following plan for every medicine that you give:

- **1.1.** The medicine and dose should be ordered by the doctor or by this manual.
- **1.2.** Do not give medication unless you think it will significantly help.
- **1.3.** Ask patient that is allergic to the medication.
- **1.4.** If patient is allergic to the medicine, consult your referral doctor.
- **1.5.** Use a drug reference, such as the Village Drug Reference. Review your drug reference unless you know where to find the information elsewhere.
- **1.6.** If patient is taking other medicine at the same time, there may be a program drug interaction. If you are not sure ask your referral doctor.
(d) the scope of authorized activities for a mobile intensive care par
But to the Alaska Dental Society and the American Dental Association, the clinic is a place where the miles of dentistry are limited daily. The dental groups object not because of any evidence that the clinic provides unsterilized care, but because it is run by Native Alaskans, who is not a dentist. After two years of training in a program unique to Alaska, Mr. Johnson performs basic dental work like drilling and filling cavities.

Billing for CHAP Services

Follow these instructions to obtain
- Check off the following:
  - CHAP and Medicaid
  - Check off the following:
    - CHAP and Medicaid
    - Check off the following:
      - CHAP and Medicaid
      - Check off the following:
        - CHAP and Medicaid
        - Check off the following:
          - CHAP and Medicaid
          - Check off the following:
            - CHAP and Medicaid

http://manuals.medicalalaska.com/tribal/tribal.htm
CHAP

• Built into the system
• Not a special team
• Sustainable, career path
• Funded

Universal Challenges

• Rural EMS faces growing challenges with aging workforce and fewer volunteers
• Demands of urban equivalency difficult to meet
• Transport expenses are significant for providers (lives) and communities ($)
• Alaska faces same challenges (and more!) but also has had some successes

Summary

• Defining a pragmatic (different) standard of care in some cases may make sense
• Special resources are nice but likely a luxury
• Pragmatism, politics and payment were aligned to promote a radical change in delivery of healthcare with CHAPS
• Radical change, once accepted, becomes commonplace
Conclusion and Thanks

Thanks to all the selfless folks: EMS providers and Medical Directors in the Bush

Enjoy Your Conference!

@mklevy10
When the Only Ambulance Is a Helicopter

Life Saved
$50,000 Flight