Key Takeaways – SME Chat Paramedicine Emergency Care with LifeFlight

This SME Chat highlights LifeFlight and their free First Minutes Matter training course.

LifeFlight is a not-for profit aeromedical emergency rescue, protection and retrieval medicine service. Their capabilities span remote and primary retrievals, inter-hospital transfers and international medical repatriations. With 1 mission every 62 minutes, their mission is to provide equitable, rapid access to high-level care across Queensland.

Retrieval Services Queensland (RSQ) is responsible for managing the prioritisation of retrieval resources in Queensland (i.e. LifeFlight, RFDS, QAS) and acts as a 24/7 single point of contact for aeromedical tasking and remote clinical support.

In an emergency, always contact RSQ directly - not LifeFlight. As per the Primary Clinical Care Manual, RSQ provides 24/7 emergency clinical support and advice for rural and remote clinicians on 1800 11 44 14.

Supporting WQ HealthPathways:

Acute Presentations

SME

Tim Hair (Community Paramedic and LifeFlight Educator with 11 years military service).

Topics Covered

First Minutes Matter Program

- **Audience:** Parents, carers, volunteers, and community members in rural/remote QLD.
- **Aim:** Empower bystanders to manage the *first minutes* before retrieval arrives.
- **Training Focus:**
    - Severe bleeding control (tourniquets, pressure dressings).
    - Airway management basics.

- CPR and AED use.
- Choking management.
- Febrile seizure response.

- **Features:**
  - **Free**, accessible, scenario-based training.
  - Not nationally accredited, but participation certificates provided.
  - Especially valuable in settings where retrieval delays are unavoidable.

Red Flag Conditions – 'Pain Out of Proportion'

Time-critical emergencies where pain severity outweighs physical findings:

1. **Orbital** Cellulitis – swelling, eye pain, ↓ vision → risk of intracranial spread.
2. **Malignant** Otitis Externa – elderly/diabetic patients, severe ear pain, cranial nerve involvement.
3. **Ludwig's Angina** – submandibular swelling, airway compromise.
4. **Mesenteric Ischaemia** – severe abdominal pain, minimal signs, AF patients high risk.
5. **Aortic Dissection / Ruptured** AAA – tearing chest/abdo pain, unequal pulses/BPs.
6. **Compartment Syndrome** – pain on passive stretch, tense compartments.
7. **Acute Arterial Occlusion** – 6 Ps: pain, pallor, pulselessness, paresthesia, paralysis, poikilothermia.
8. **Necrotising Fasciitis** – rapidly spreading infection, pain disproportionate to external findings.

Free Clinical Resources for rural and remote GPs

- WQ HealthPathways
- GP Red Flag A-Z

Emerging Treatments and Tools in Emergency Medicine

1. **Asthma Management Update**
   - **Shift:** Australian Asthma Handbook (AAH) recommends **anti-inflammatory reliever therapy** (steroid + reliever) instead of blue puffer (SABA) monotherapy.
   - **Reason:** Strong evidence for reduced exacerbations and hospitalisations.
   - **See** Acute Asthma in Adults Pathway.
2. **Tranexamic Acid (TXA)**

- **Use:** Early administration (<3 hrs) in trauma and TBI. Read a review.
- **Evidence:** CRASH-1, CRASH-2, CRASH-3 trials show survival benefit.
- **Dosing:** 1g IV bolus → 1g infusion over 8 hrs (some use 2g bolus in rural settings).
- **Impact:** Low-cost, high-yield intervention in trauma.

3. **Point-of-Care Ultrasound (POCUS)**
   - **Expanding Role:** Beyond FAST scans → used for biliary, DVT, obstetric, musculoskeletal, fracture diagnosis.
   - **Access:** Portable handheld devices now widely available.
   - **Training:** AIU (Australian Institute of Ultrasound) course recommended for rural GPs.
4. **Freeze-Dried Plasma (FDP)**
   - **What:** Shelf-stable plasma (3 years at room temperature), quickly reconstituted.
   - **Why:** Provides clotting factors; superior to crystalloids in resuscitation.
   - **Use Case:** Ideal for rural/remote trauma care where cold chain for FFP is impossible. Read about FDP administration in trauma.
   - **Status:** In use internationally; feasibility under review in Australia.

Future of Paramedicine

- **Trends:** Moving into broader roles beyond ambulance work.
- **Models:**
  - Community Paramedicine: managing chronic disease, after-hours presentations.
  - Paramedic Practitioners: advanced scope (prescribing rights, acute care) similar to nurse practitioners.
- **Barriers:** Requires Medicare and legislative recognition.
- **Potential Benefits:**
  - Workforce support in rural/remote settings.
  - Reduced unnecessary ED transfers.
  - Relief for overstretched GP workforce.

Q&A Highlights

- **Triage Hotlines:** Often over-triage; more skilled triage systems needed to reduce unnecessary transports.
- **LifeFlight is hosting free *First Minutes Matter* courses in the North West, Central West and South West – See Available Workshops and Calendar.**