SOMDA instance

- **Gateway**
  - Proxy Service
- **Ventilator**
  - Med. Dev. Service
- **Feed pump**
  - Med. Dev. Service
- **Smart App**
  - Service Consumer
- **ICU bed**
  - Med. Dev. Service

Clinical Workplace SOMDA Backbone

- **EHR**
  - Proxy Service
- **Dialysis**
  - Med. Dev. Service
- **Infusion pump**
  - Med. Dev. Service
- **Vital signs monitor**
  - Med. Dev. Service

WSN Proxy Service
Abstract view

Communication Backbone

Provider Consumer  Provider Consumer  Provider Consumer  Consumer

Provider  Provider  Provider  Consumer

Consumer  Provider Consumer  Provider Consumer  Provider
Test a provider

Test app (consumer)  ---  Device under test (provider)

Test result

Provider
Setup a consumer that executes a sequence of tests

1. Reference Provider/Consumer Specification - Gemini Public - Confluence (hl7.org)
   (discovery, connection establishment, metric retrieval, alert retrieval, context retrieval, external control invocation)

2. Record the success discovering the provider, establishing a connection, retrieving metrics etc.

3. DONE

These are basic interoperability tests

Real providers require real test scenarios
Test a consumer

Test app (provider) — Device under test (consumer)

Test result

Consumer

[Diagram showing a computer connected to a consumer device for testing.]