NC Department of Health and Human Services
NCOEMS Chief 101

Systems
Goals

• The goal of this program is to provide information and resource materials to current and future EMS & Rescue Squad Chiefs, administrators, managers, leaders, and officers regarding the various aspects, concepts, resources, regulations, and complexities involving the administration, operations, and organization of North Carolina EMS agencies and departments.

• The program consists of several topic areas but is not intended to be all inclusive of all aspects of EMS management and administration.
Goals

• To assist EMS agencies, departments, and rescue squads in accessing and understanding information regarding the various general statutes, administrative rules, policies, protocols, and associated requirements and responsibilities with coordinating and managing an EMS System in the State of North Carolina.
Objectives

At the conclusion of this presentation, participants will be able to:

• Discuss various components of North Carolina General Statutes as they apply to the Systems component of NCOEMS;

• Identify and discuss the various sections of NCAC 10A 13P rules as they apply to Systems components and credentialing;

• Discuss the elements of a required “System Plan;”
Objectives

• Explain System Oversight as it applies to EMS agencies;

• Recognize the role, responsibilities, and authority of the EMS System Medical Director;

• Reference NCAC rule pertaining to agency Peer Review program elements and requirements;

• Discuss the requirements of system Protocols;

• Locate and recognize information regarding the requirements of Provider Licensure.
Systems

“EMS System”

• A coordinated arrangement of local resources under the authority of the county government (including all agencies, personnel, equipment and facilities) organized to respond to medical emergencies and integrated with all other health care providers and networks including public health, community health monitoring activities and special needs populations.

• 10A NCAC 13P. 0102 (21)
Systems

NC General Statute 143-517
• Each county shall ensure that emergency medical services are provided to its citizens.

NC General Statute 153A-250
• A county may by ordinance franchise ambulance services provided in the county to the public at large.
  • Local Ordinance
  • Enforced by the County
Systems

Franchise Ordinance

• Grant franchises to ambulance operators;
• Limit the number of ambulances in the county;
• Set areas of operation;
• Set rates, fees, and charges;
• Set minimum limits of liability insurance;
• Establish other necessary regulations consistent with NC General Statute and DHHS regulation.
Systems

System Models vary across the state:

- County agency only
- Volunteer Agency(s) only
  - With supplemental paid staff
- Combination County agency/Volunteer agency(s)
- Hospital-based
- Municipal
- Fire
- Private
- Combination of all the above
10A NCAC 13P .0201- EMS System Requirements

• County governments shall establish EMS Systems.

• *Each EMS System shall have:*
  • A defined geographical area for the EMS System
    o Minimum of one county
    o May be multiple provider service areas
    o The highest level of care offered within the provider service area must be available 24 hours a day
Systems

- Defined scope of practice for all EMS personnel
- Written policies/procedures describing the:
  - dispatch, coordination, and oversight of all responders that provide EMS Care, specialty patient care skills & procedures and ambulance transport;
  - utilization of data for management of the systems resources;
  - the use of SCTP and Air Medical Programs
- At least one licensed provider
- A list of vehicles and personnel (Continuum)
- A written Infectious Disease Control Policy
Systems

• An EMS Communication System that provides for:

  • Public access to a PSAP using 911,
  • Operation by public safety telecommunicators 24 hours a day with appropriate training,
  • Dispatch of the most appropriate emergency medical response unit or units,
  • Two-way radio voice communications between the EMS unit and PSAP and receiving facilities
Systems

• A written Continuing Education Program
• Written policies and procedures to address management of the EMS System including:
  o Triage and Transport
    o Trauma
    o Stroke
    o STEMI
    o Burns
    o Pediatrics
• Triage and Transport to facilities outside of the system
Systems

- Diversion or Bypass
- Reporting, monitoring and establishing standards for system response times
- Weekly updating of SMARTT (State Medical Asset and Resource Tracking Tool)
- Disaster plan
- Mass-gathering plan
NEW

- Mass-Casualty plan
- Weapons plan (.0216)
- Plan for reporting suspected child abuse
- Plan for reporting suspected abuse of the disabled
- Plan for how each responding agency is to maintain a roster
  (obtain provider numbers for each entity that provides EMS Care)
RAC Affiliation

Administrative RAC Listing:
- Mountain Area Trauma RAC (Mission Hospitals)
- Metrolina Trauma Advisory Committee (Carolina Medical Center)
- Triad RAC (WFU Baptist/Moses Cone)
- Southeastern RAC (New Hanover Regional)
- Eastern RAC (Vidant Medical Center)
- Duke RAC (Duke University Hospital)
- Mid Carolina Trauma RAC (UNC Health Care)
- Capital RAC (WakeMed)

- Indicates a Level I Trauma Center
- Indicates a Level II Trauma Center
- Indicates a Level III Trauma Center

Counties with different colors indicate two or more hospitals with different RAC affiliations as follows:
- Catawba County: Catawba Valley Medical Center – Metrolina
  Frye Regional Medical Center – Triad
- Iredell County: Iredell Memorial Hospital – Triad
  Davis Regional Medical Center – Triad
  Lake Norman Regional Medical Center – Metrolina
- Richmond County: Sandhills Regional Medical Center – Metrolina
  FirstHealth Richmond Memorial Hospital – Mid Carolina
- Wake County: Duke Raleigh Hospital – Duke
  Rex HealthCare – Mid Carolina
  WakeMed Hospital – CapRac
System Reviews

• The purpose is to conduct a comprehensive review of the EMS System Plan for compliance of current rule, identify deficiencies, and make recommendations that may enhance or improve the EMS System.

• 10A NCAC 13P
  • .0201 System Requirements
  • .0401 Medical Oversight
  • .0403 Medical Director
  • .0407 EMD
  • .0408 Peer Review
Systems

• Medical Oversight as required by NCAC 10A 13P Section .0400
Medical Oversight

10A NCAC 13P .0401

• Each EMS System shall have the following components in place to assure medical oversight of the system:
  ○ A Medical Director
    ○ Appointed by the County
  ○ Meeting criteria defined in the “NC College of Emergency Physicians: Standards for Medical Oversight and Data Collection”
Medical Oversight

• Written treatment protocols for adult and pediatric patients,
• For systems providing EMD; EMDPRS approved by medical director,
• An EMS Peer Review Committee,
Medical Oversight

- Written procedures for use by EMS personnel to obtain on-line medical direction shall:
  • Be restricted to medical orders that fall within the scope of practice of the EMS personnel and within the scope of approved system treatment protocols:
  • Be provided only by a physician, MICN, EMS-NP, EMS-PA
    • ONLY physicians may deviate from written protocols
  • Be provided by a system of two-way voice communication that can be maintained throughout the treatment and disposition of the patient
EMS System Medical Director

10A NCAC 13P .0403

- The Medical Director for an EMS System is responsible for:

  • Ensuring medical control is available 24 hours a day
  • The establishment, approval, & annual updating of adult & pediatric protocols and EMDPRS
  • Medical supervision of the selection, system orientation, CE and performance of all EMS personnel
  • Medical supervision of a scope of practice performance evaluation for all EMS system personnel based on protocols
EMS System Medical Director

- The medical review of the care provided to patients
- Providing guidance about equipment, medical supplies, and medications carried on vehicles
- Keeping the care provided up to date with current medical practice
- Developing and implementing an orientation plan for all facilities providing on-line medical direction
EMS System Medical Director

- The Medical Director may suspend temporarily, pending review, any EMS personnel from further participation in the EMS System when:
  - he or she determines that the individual's actions are detrimental to the care of the patient,
  - the individual committed unprofessional conduct,
  - or the individual failed to comply with credentialing requirements.
EMS System Medical Director

During the review process, the Medical Director may:

• (1) restrict the EMS personnel's scope of practice pending completion of remediation on the identified deficiencies;

• (2) continue the suspension pending completion of remediation on the identified deficiencies; or

• (3) permanently revoke the EMS personnel's participation in the EMS System.
Protocols

10A NCAC 13P .0405

- Treatment Protocols used in the EMS System shall:
  - Be adopted in their original form from the published NCCEP protocols.
  - NOT contain medical procedures, medications or IV fluids that exceed the scope of practice defined by the NC Medical Board pursuant to N.C.G.S. 143-514 for the level of care offered in the EMS System and any other applicable health care licensing boards.
Protocols

– Treatment Protocols used in the EMS System may:
  • Be modified locally if there is a change which will optimize care within the local community.
  • Changes and additions shall be submitted to the OEMS Medical Director for review and approval at least 30 days prior to implementation of the change.
NC EMS PROTOCOL, PROCEDURES, AND POLICY MODIFICATION FORM

EMS System Name: ___________________________ Proposed Implementation Date: ___________________________
System Medical Director: ______________________ Signature: ______________________
System Administrator: ___________________________ Signature: ______________________

DOCUMENTATION OF EMS SYSTEM PROTOCOLS (Check all that apply)

☐ EMS System wishes to adopt recently revised NCCEP Protocol:
  Protocol # ______ NCCEP Revision Date: ____________ Protocol # ______ NCCEP Revision Date: ____________
  Protocol # ______ NCCEP Revision Date: ____________ Protocol # ______ NCCEP Revision Date: ____________
  Protocol # ______ NCCEP Revision Date: ____________ Protocol # ______ NCCEP Revision Date: ____________
  Protocol # ______ NCCEP Revision Date: ____________ Protocol # ______ NCCEP Revision Date: ____________
  Protocol # ______ NCCEP Revision Date: ____________

☐ EMS System wishes to change/alter previously approved System Protocols (attach one electronic copy for review) (See Note 1)

DOCUMENTATION OF EMS SYSTEM PROCEDURES (Check all that apply)

☐ EMS System wishes to adopt recently revised NCCEP Procedure:
  Procedure # ______ NCCEP Revision Date: ____________ Procedure # ______ NCCEP Revision Date: ____________
  Procedure # ______ NCCEP Revision Date: ____________ Procedure # ______ NCCEP Revision Date: ____________

☐ EMS System wishes to change/alter previously approved Procedure Documents (attach one electronic copy for review) (See Note 1)

DOCUMENTATION OF EMS SYSTEM POLICIES (Check all that apply)

☐ EMS System wishes to adopt recently revised NCCEP Policy:
  Policy # ______ NCCEP Revision Date: ____________ Policy # ______ NCCEP Revision Date: ____________
  Policy # ______ NCCEP Revision Date: ____________ Policy # ______ NCCEP Revision Date: ____________

☐ EMS System wishes to change/alter previously approved System Policy Documents (attach one electronic copy for review) (See Note 1)

☐ EMS System wishes to add additional policies to the previously approved System Policy Documents (attach one electronic copy for review)

Note 1: A cover letter listing a summary of all changes in protocols, procedures and policies must be included with form.

System Modification Application
DHHSDHSR/COEMS 4919

Effective 8/1/2014
**North Carolina Medical Board**  
**Approved Medications for Credentialed EMS Personnel**

EMS personnel at any level who administer medications must do so within an EMS system that provides medical oversight. Personnel must follow written treatment protocols and must complete appropriate medical education. All EMS System protocols and policies must be reviewed and approved by the Medical Director of the Office of EMS.

All items highlighted in “red” are required by NCCEP in all systems with EMS personnel credentialed at the specified level. Specialty Care (SCTP) required items are not listed here, as they can be found on the Specialized Ambulance Protocol Summary (SAPS) form.

<table>
<thead>
<tr>
<th>Medications</th>
<th>EMR</th>
<th>EMT</th>
<th>AEMT</th>
<th>MEDIC</th>
</tr>
</thead>
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<tr>
<td>ACE inhibitors</td>
<td></td>
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<td>X</td>
<td></td>
</tr>
<tr>
<td>Acetaminophen</td>
<td></td>
<td>X</td>
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<tr>
<td>Adenosine</td>
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<tr>
<td>Aminophylline</td>
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<td></td>
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<tr>
<td>Aniodarone</td>
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<td></td>
<td>X</td>
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<tr>
<td>Anti-arrhythmic</td>
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<td>X\textsuperscript{12}</td>
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<tr>
<td>Antibiotics</td>
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<td>X</td>
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<tr>
<td>Anti-emetic preparations</td>
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<tr>
<td>Antivirals</td>
<td></td>
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<tr>
<td>Aspirin</td>
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<tr>
<td>Atropine</td>
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<tr>
<td>Barbiturates</td>
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<td></td>
<td>X</td>
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<tr>
<td>Benzodiazepine preparations</td>
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<td></td>
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<tr>
<td>Beta agonist preparations</td>
<td></td>
<td>X\textsuperscript{2}</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Approved Skills for Credentialed EMS Personnel

EMS personnel performing these skills must do so within an EMS system. Personnel must follow written treatment protocols and must complete appropriate medical education. All EMS System protocols and policies must be reviewed and approved by the Medical Director of the Office of EMS.

All items highlighted in “red” are required by NCCEP in all systems with EMS personnel credentialed at the specified level. Specialty Care (SCTP) required items are not listed here, as they can be found on the Specialized Ambulance Protocol Summary (SAPS) form.

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<tr>
<th>Skills</th>
<th>EMR</th>
<th>EMT</th>
<th>AEMT</th>
<th>MEDIC</th>
</tr>
</thead>
<tbody>
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<td>12-Lead ECG Acquisition &amp; Transmission</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>12-Lead ECG Interpretation</td>
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<tr>
<td>15-Lead ECG Acquisition</td>
<td></td>
<td></td>
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<td>X</td>
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<tr>
<td>Arterial Access - Blood Draw</td>
<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>Arterial Line maintenance</td>
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<td></td>
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<tr>
<td>Blind Insertion Airway Device (BIAD)</td>
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<tr>
<td>Capnography (Waveform)</td>
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<td>X</td>
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<tr>
<td>Carbon Monoxide Measurement (non-invasive)</td>
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<td>X</td>
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<tr>
<td>Cardiac Monitoring</td>
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<tr>
<td>Cardiac Pacing</td>
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<tr>
<td>Cardiopulmonary Resuscitation</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Cardioversion</td>
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<tr>
<td>Carotid Massage</td>
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<td>X</td>
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<tr>
<td>Central Venous Pressure Line Maintenance</td>
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<td>X</td>
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<tr>
<td>Chest Compression, External Device</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Peer Review Committee

N.C.G.S. 131E-155 (6b)

• “Emergency Services Peer Review Committee” means a panel composed of EMS program representatives to be responsible for analyzing patient care data and outcome measures to evaluate the ongoing quality of patient care, system performance, and medical direction within the EMS System.

• The committee membership shall include physicians, nurses, EMS personnel, medical facility personnel, and county government officials.
Peer Review Committee

- Review of medical records by the EMS Peer Review Committee is confidential and protected under N.C.G.S. 143-518.

- An EMS Peer Review Committee, its members, proceedings, records and materials produced and materials considered shall be afforded the same protections afforded Medical Review Committees under N.C.G.S. 131E-95.
Peer Review Committee

- The EMS PEER Review Committee for an EMS System shall:
  • Be composed of membership as defined in N.C.G.S. 131E-155(6b)
  • Appoint a physician as chairperson
  • Meet at least quarterly
  • Use info gained from the analysis of system data submitted to the OEMS to evaluate the ongoing quality of patient care and medical direction within the system
Peer Review Committee

• Use information to make recommendations regarding the content of the CE program
• Review protocols and make recommendations for changes to the medical director
• Establish and implement a written procedure to guarantee due process reviews for personnel temporarily suspended by the medical director
• Record and maintain minutes
• Establish and implement system performance improvement guidelines that meet or exceed the statewide standard
PRC Purpose in Summary

• Evaluate the ongoing quality of patient care and medical direction within the system
• Make recommendations regarding the content of the CE program
• Recommend protocol changes to the medical director
• Guarantee due process reviews for personnel temporarily suspended by the medical director
• Establish and implement system performance improvement guidelines
Peer Review Committee

- Adopt written guidelines that address:
  - Structure of committee membership
  - Appointment of committee officers
  - Appointment of committee members
  - Length of terms
  - Frequency of attendance
  - Establishment of a quorum
  - Confidentiality of medical records and personnel issues
EMS Provider License Requirements

10A NCAC 13P .0204

- Any firm, corporation, agency, organization or association that provides emergency medical services shall be licensed as an EMS Provider by meeting and continuously maintaining the following criteria:
  - Be affiliated with each EMS System where there is to be a physical base of operations or where the provider will provide point-to-point patient transport within the system
EMS Provider License Requirements

- Permitted Ambulance(s)
- Submit a written plan detailing how the provider will furnish credentialed personnel
- Meet any franchise requirements of the system
- Provide systematic, periodic inspection, repair, cleaning, and routine maintenance of all responding ground units and maintain records for inspection
- Collect and within 24 hours electronically submit to OEMS EMS Care data that uses EMS data set and data dictionary as specified by the NCCEP standards
EMS Provider License Requirements

• Develop and implement operational protocols for the management of equipment, supplies and medications and maintain records for inspection

• These protocols shall include a methodology:
  • To assure that each vehicle contains the required equip and supplies
  • For cleaning and maintaining the equip and vehicles
  • To assure that supplies and equipment are not used beyond the expiration date and stored in a temperature controlled atmosphere in accordance with manufacturers’ specifications
EMS Provider License Conditions

10A NCAC 13P .0205

- Only one license per EMS Provider
  - Not Transferable
  - Posted in a prominent location accessible to public view

- License is good for six (6) years
STATE OF NORTH CAROLINA
Department of Health and Human Services
Division of Health Service Regulations
Office of Emergency Services

EMS System Modification
Application
Updated January 1, 2012
EMS SYSTEM MODIFICATION
APPLICATION
CONTENT INFORMATION AND SELECTION

Application Date: __________ Proposed Implementation Date: __________

Descriptive Title: __________

This modification involves: (Check all boxes that apply, complete appropriate sections, and attach any required documentation.)

Check Section
☐ I. EMS System Information
  (Section must be completed for any modification)

☐ II. New EMS Provider Application:
  ☐ Licensed Provider ☐ Non licensed Provider
  (Complete sections I. III and VIII)

☐ III. C. Provider Name or Ownership Change Only:
  ☐ Licensed Provider ☐ Non licensed Provider
  (Complete sections I. III (C) and VIII)

☐ III. The Addition of Current Licensed or Non-Licensed EMS Provider(s) to the EMS System
  (Complete sections I. III and VIII)

☐ IV. Modifying the Level of Care for of Current Licensed or Non-Licensed Provider(s) participating
  Within and or outside the EMS System
  (Complete sections I. IV. and VIII)

☐ V. Deletion of any System Provider or Non-Traditional Practice Setting:
  ☐ Licensed Provider ☐ NonLicensed Provider ☐ Non Traditional Practice Setting
  (Complete sections I. V. and VIII)

☐ VI. EMS Center Information and Application:
  ☐ Addition or ☐ Deletion to an EMS System
  (Complete sections I. VI and VIII)

☐ VII. Medical Oversight:
  ☐ A. Protocol, Medication, Policies or Procedure or Peer Review Committee Modification
    (Complete sections I. VII A, and VIII)

  ☐ B. System Medical Director or Assistant Modification and Requirements
    (Complete sections I. VII B, and VIII)

☐ VIII. Endorsements

Note: Please be prepared to present documentation or other information supporting your answers.
Medications and Skills

- North Carolina Medical Board Approved Medications and Approved Skills for Credentialed EMS Personnel (136 Kb PDF) - Revised 06/19/2018

EMS Protocols

- EMS Patient Care Treatment Protocols for NC EMS Systems (21.9 Mb PDF) - Revised 12/16/2017
- Individual Protocols

EMS Policies

- EMS Patient Care Related Operational Policies for NC EMS Systems (1 Mb PDF) - Revised 1/1/2017

EMS Procedures

- EMS Patient Care Procedure Documents for NC EMS Systems (3.6 Mb PDF) - Revised 6/8/2017

Qualifications for Medical Directors

- Requirements for NC EMS Medical Directors, Educational Advisors, and Assistant Medical Directors (114 Kb PDF)

Performance Improvement

- North Carolina EMS Performance Improvement Guidelines (864 Kb PDF)
NCOEMS Regions

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Anthony Davis – Regional Specialist (Systems)

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Regional Specialist
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Paul Allen – Regional Specialist (Logistics)
Robert Amerson – Regional Specialist (Education)
Randall Likens – Regional Specialist (Systems)
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Summary & Questions