Controlling Norovirus Outbreaks In Long Term Care Facilities

Report of Deliberations by The Norovirus Workgroup

Convened by

Center for Public Health Practice
Public Health Division
Oregon Health Care Authority

Facilitation & Report by
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Background

Norovirus is the leading cause of gastroenteritis outbreaks in institutional settings across the nation. Its impact is most keenly felt in long term care facilities (LTCFs) for the elderly. More than 50% of LTCF residents may have vomiting and diarrhea. Caregivers may be infected and temporarily incapacitated. In a ripple effect, new data show that Norovirus outbreaks in long term care facilities increase the rates of elder hospitalizations and deaths *from all causes*.

Outbreak control is difficult and costly in the absence of an effective vaccine, and the problem may be getting worse. In January 2013, forty Norovirus outbreaks were investigated in Oregon alone, compared to 20 last year-- and these are just the outbreaks that were reported to the state public health division. While norovirus infections do not cause serious illness for most people, the very young and elderly are particularly susceptible to more serious episodes of illness from the virus. CDC estimates that norovirus causes 19-21 million cases of gastroenteritis nationally each year, 20,000 hospitalizations and 800 deaths.

While the science for controlling norovirus outbreaks is still not well developed, CDC developed a set of recommendations in 2011, published as *Guideline for the Prevention and Control of Norovirus Gastroenteritis Outbreaks in Healthcare Settings.* This document includes recommendations in eleven areas:

- Patient Cohorting And Isolation Precautions
- Hand Hygiene
- Patient Transfer and Ward Closure
- Diagnostics
- Personal Protective Equipment
- Environmental Cleaning
- Staff Leave and Policy
- Visitors
- Educations
- Active Case-Finding
- Communication and Notification

In Oregon, the Oregon Health Authority(OHA), Public Health Division, Acute and Communicable Disease Prevention Center, is responsible for tracking disease outbreaks, compiling data about communicable diseases, and providing guidance and support to local health departments. Local health departments respond to outbreaks in long term care facilities as well as other locales.

While state public health is responsible for receiving and compiling information about reportable diseases, as defined in statute, norovirus is not a reportable disease in the state. However, outbreaks are reportable. The Public Health Division has been tracking norovirus outbreaks -- specifically in nursing homes and similar settings -- since 2003. As a result, Oregon has provided CDC with significant data

about norovirus that, in turn, helped support development of the guidelines for prevention and control of outbreaks of the disease.

The Oregon Department of Human Services (DHS), through its Office of Licensing and Regulatory Oversight, is responsible for the licensing, certification, regulatory and corrective action functions for a range of organizations and providers, including long term care facilities. LTCFs include skilled nursing facilities, residential care facilities, continuing care retirement communities (CCRCs), assisted living facilities, and adult foster homes. Their employee surveyors and regulators are guided by DHS regulations and follow CDC guidelines for communicable disease responses.

Meeting Design and Content:

The Oregon Health Authority convened a multi-sector group of experts on Norovirus outbreaks in long term care facilities in September 2013 to prepare for the 2013–2014 Norovirus season. The objectives of the meeting included the following:

- Highlight best practices of state government, local health authorities and long term care management and employees to reduce the number of new Norovirus cases.
- Create an action plan for each sector to reduce burden of Norovirus disease.
- Develop informed recommendations for collaborations between the Oregon Health Authority, local public health authorities, long term care facilities and others to reduce the number and impact of Norovirus outbreaks.

Invitees to the meeting included a broad representation of the organizations involved in norovirus outbreaks in LTCFs, including:

- OHA, State Public Health Division
- DHS Office of Licensing and Regulation Oversight
- Infectious disease experts
- Administrators and staff of LTCFs
- Local public health departments

OHA contracted with Milne & Associates, a public health consulting firm with national and international experience, to help plan and facilitate the meeting.

Attendance was excellent, with 26 of 29 invitees participating. In addition, Aron Hall, DVM, epidemiologist from CDC and expert in norovirus issues, was invited to speak and to participate in the deliberations during the meeting. The meeting was scheduled for 5½ hours, including time for a working lunch. (See Appendix 1 for a listing of invitees and Appendix 2 for the meeting agenda.)

The session began with a brief overview of the challenges presented by norovirus from the CDC perspective. One of Dr. Hall's major points was that the science pertaining to the control and prevention of norovirus transmission is very limited. He pointed out that there is a good deal of misinformation relating to effective cleaning/disinfectant agents and effective control measures.

Next, the meeting continued with a facilitated discussion among five panelists, each representing one of the organizational groups at the meeting. The panelists helped frame the issues by discussing their respective perspectives about challenges faced during norovirus outbreak, and unique issues each faces. Among challenges identified were the following:

- Lack of consistency among state, local and private policies and guidelines
- 48 hour exclusion of staff after symptoms are gone – creates staffing hardships (LTCF)
- Addressing simple actions (e.g. combing hair) that contribute to spreading disease (OLRO)
- Reducing the volume of guidelines/regulations to digestible amounts (State PH)
- Younger employees working in assisted living tend to work sick (Inf. Control)
- Lack of clear guidelines about reporting outbreaks (LHD)

Panelists were asked to share information from their respective sectors that would be important for everyone to know for a successful meeting. Among the responses:

- There is a cost-benefit to everything we do during an outbreak, including excluding low-income workers from work. (PH)
- Improved coordination and collaboration between surveyors/regulators, LHDs and others is needed (Inf. Control, LHD)
- Federal regulations differ from state regulations, creating confusion and inconsistency (OLRO)

Participants were placed in three multidisciplinary groups, each with a different area of focus: institutional issues, infection control issues, and prevention issues. Topics to be considered by the respective groups were related to those contained in the CDC Guidelines, as follows:

Group	**Issues Covered**
Group 1: Institutional Issues:	• Admissions & transfers • Employment • Patient Isolation (Placement) • Floor closure • Environmental Cleaning • Visitors • Sick leave

Group 2: Control Issues:	• Data Collection/Investigations & Reporting • Control & Outbreak Response • Personal Protective Equipment • Identifying an End of Outbreak • Active Case Finding • Communication & Notification
Group 3: Prevention Issues	• Education • Inspection, Regulations, Technical Assistance • Environmental Cleaning Requirements • Communication & Notification • Case Finding

For the remainder of the morning, the three groups worked separately to identify issues and challenges faced by the organizations and agencies dealing with norovirus outbreaks. For each issue identified, the groups were asked to identify the problems they present, their causes and contributing factors, what ideal would look like, and what, if any, current policies contribute to the problems. Each group documented their discussion results on flip charts, and summarized their work to the other participants in a report out session immediately after the working lunch.

In the afternoon, the three groups continued their deliberations. The groups were asked to identify for each of the issues listed in the morning the following:

- Recommendations for actions to resolve the problem
- Who should be involved in the actions
- What next step(s) to take for each issue
- What resources would be needed
- Suggested components for evaluating the results

The meeting concluded with a reporting out by each of the groups, summarizing their afternoon work. Representatives from the Public Health Division, Acute and Communicable Disease Prevention Section, the meeting host, thanked meeting participants for their contributions and indicated that follow-up would occur.

The facilitators evaluated the meeting. (See Appendix 5)

Key Findings:

Each of the three groups identified a number of issues and problems that need to be addressed in order to assure improved responses to norovirus outbreaks. Many served as the basis for recommendations, which are summarized in the next section.

Appendix 2 includes a complete listing of all of the issue discussion points by the three groups.

Perhaps the most frequently named concerns were (1) the lack of consistency between state and local organizations in the interpretation and application of state and federal laws and regulations and corporate policies, (2) punitive policies related to reporting and to staff attendance during outbreaks, (3) lack of clarity regarding requirements about the reporting of outbreaks, and (4) challenges with case finding. Mention by Dr. Hall that the science regarding norovirus control is problematic appeared to be new information to many.

Among other key findings were the following:

<u>Institutional Issues:</u>

- There is a need for more complete and accurate information sharing between hospitals discharging patients and LTCFs receiving them
- No one single individual in the system manages a patient from start to finish
- There is fragmentation and inconsistency across the system, including inconsistent policies and protocols
- There is a need for improved monitoring of infection control measures
- Shortage of timely training, high staff turnover and lack of frequent practice to develop skills limits staff understanding and comfort in managing patients with norovirus
- A lack of paid sick leave together with punitive attendance policies contribute to a cycle of transmission and to staff turnover
- There is room for improvement in communicating the nature of norovirus infection to visitors and family members transparently and consistenly

<u>Control Issues</u>

- Challenges with early detection of norovirus infection/outbreaks
- Lab turnaround time is long, and expense of commercial testing is high
- Facilities don't have clear information regarding whether to report or not
- Policies between corporate owners, not-for-profit organizations, and public agencies are often inconsistent
- Pressure is exerted by hospitals and other sources on LTCFs to accept patients with NV infection, even during an outbreak of NV
- Statewide standards require greater clarity to assure consistent and sustainable responses
- Case definitions are inconsistent between CMS and state and local public health
- It is difficult to identify the end of a cluster, but new admissions are stopped until the end of an outbreak
- Protocols regarding use of personal protective equipment (PPE) in LTCFs are inconsistent and guidelines are unclear
- Corporate and public health policies are inconsistent

Prevention Issues:

- High staff turnover requires frequent education and training, which can be challenging to provide, given patient loads.
- Roles of staff from different agencies are not clear and important staffing resources for prevention (e.g. environmental health specialists) are generally not available
- Consistent communications and messaging for families isn't always consistently done
- Hand washing practices need to be more consistently practiced

At the conclusion of this portion of the meeting, participants were asked if they were in consensus that the issues and challenges identified are the principal ones. There was general agreement.

Key Recommendations:

Each of the three groups generated recommendations for one or more of the issues identified in the morning, and generally for issues thought to be the most significant. While no group addressed all the issues requested (see page 6), the recommendations nevertheless provide an excellent starting point for future work.

Two of the groups, Prevention and Control, made recommendations regarding defining case finding, recognizing one of the more frequently mentioned issues in the morning sessions. Two generated recommendations in response to challenges faced with the transfer of patients, calling for more complete communication by one, and creation of a standardized transfer form and creation of financial disincentives for discharge without complete information by another. Later during the meeting, one of the participants suggested that the term "alignment" be used in place of "standardization."

In response to the poor scientific base referred to by Dr. Hall, the institutional group recommended adopting procedures that are evidence-based where possible. The control group suggested creation of a report card measuring norovirus preparedness among LTCFs.

The full list of recommendations made by the three work groups is included in Appendix 4.

Best Practices and Parking Lot Issues:

As the day's work began, each group was asked to capture ideas about best practices that can be found in the field, and to document issues for the "parking lot" that will

need more discussion and work. Very few best practices were identified, perhaps reflecting the current challenges in responding to norovirus outbreaks. Those documented included the following:

- Monitor compliance with hand washing
- Giving CEUs for LTCF staff taking trainings in norovirus
- Signage for visitors to a facility, warning no entry if they've had diarrhea recently

Similarly, few parking lot issues were recorded, perhaps reflecting the broad amount of work done during the meeting that, in its totality, suggests work yet to be addressed. Those captured were:

- Need public policy changes
- Standardization and alignment of practices across the spectrum (a common theme)
- Develop a "score" of some kind to track nursing home responses implemented (facility self reporting to assess score and duration)

Follow-up Conference Calls:

After the September meeting, M&A drafted a summary of the meeting, including a table summarizing recommendations by category. The Oregon Health Authority contracted with M&A to solicit feedback on the draft report from meeting participants, and to develop a White Paper to more deeply explore opportunities for the control and prevention of norovirus.

Two conference calls were scheduled – January 6 and 10 – to provide participants with alternative times to provide feedback. Additionally, copies of the table summarizing recommendations by category, with spaces for feedback, were sent to all who had participated in the September meeting. (Appendix 5)

While very few participants returned completed the table of recommendations, it did serve as a useful guide for the follow-up calls. Two meeting participants connected with the first call and nine participated in the second call for a total of 42% of the meting participants. A number of very useful ideas expanded on the recommendations, with specific actions identified, as discussed below. Notes from the two calls can be found in Appendix 6.

Discussion:

As mentioned, attendance at the meeting was excellent, and participants were deeply engaged from the beginning to the end of the meeting. Discussion was lively and candid, but constructive, respectful, and positive. Participants from each of the groups represented acknowledged difficulties with their own sectors' responses to norovirus outbreaks without defensiveness. There clearly is much work to be done to standardize and align definitions, protocols and response practices for controlling

and preventing norovirus outbreaks. But this group of participants is not only up to the challenges but willing to do the work.

Reviewing the recommendations from the meeting critically, there clearly is more work to be done. Of the meeting outcomes desired the second one was not achieved: *Create an action plan for each sector to reduce burden of Norovirus disease.* Nevertheless, an important first step was taken through this meeting. As more than one participant noted, "this is the first time representatives of public health, regulatory agencies, and long term care facilities have ever gotten together."

There seemed to be consensus that a second meeting is needed to continue the work. One participant suggested a shorter meeting to identify the areas where there is consensus, and then to begin identifying action steps to take. If such a meeting is planned, it is recommended that steps be taken to assure broader involvement of long term care facilities. This meeting included only two staff from LTCFs, and both acknowledged a little discomfort in "representing" their peers. One step that might be considered is to hold a second meeting in a LTCF facility, and to include representative of the industry in planning the meeting. Finally, in his closing remarks, Dr. Hall suggested that there is a lot of room for improvement with following basic infection control procedures.

The two follow-up calls were quite successful and may have fulfilled the need for a second meeting, discussed above, at least for the present time. Some of the key points raised during the two calls that build on earlier recommendations include:

- The idea of building a page on the OHA website dedicated to sharing practices and tools that work appeared to be acceptable to all. Several call participants expressed a willingness to help.

- Similarly, several expressed interest in contributing to development of a tool kit for handling outbreaks, and that placement on the OHA webpage would be ideal. It was suggested that bringing in CLHO early in the process would be a good way to get buy-in, and that OR-Epi could do the training.

- A variety of ideas were shared regarding the need for training and how to best fulfill those needs. Providing CE credit could provide an incentive. OHA could help in looking for resources, while OR-Epi, the Oregon Safety Commission, The Oregon Leading Age groups for non-profits, the Oregon Health Care Agency and the Oregon Foster Home Association are all resources that could help with training.

- Several (Yamhill County, Washington County and Multnomah County as well as others) indicated they have a variety of resources used to address norovirus that could be shared with other to avoid "re-inventing the wheel."

- Developing a matrix of approaches that are shown to work in different settings (e.g. hospital, SNF, RCF,, CCRC, Assisted Living, Foster Homes, etc.) would be useful , especially if presented as guidelines instead of rules. A collaborative process could be developed, including representatives from the LTCF domain.

- Environmental Health professionals in local health departments are a potential resource to assist in preventing and controlling outbreaks.

Several other ideas can be considered from the notes of the content-rich follow-up calls. Those listed above appeared to be logical and feasible places to start for now. It is recommended that a small work group could be convened by OHA to begin work on one or two of these recommendations in the near term.

Several issues that appeared to be considered priorities at the September meeting were not discussed during the follow-up calls. They should remain in the mix, however, to be addressed later. Included in this category are the following:

- Assuring more complete communication about patient infectious status at time of discharge

- Creation of a standardized transfer form

- Creation of financial disincentives for discharge without complete information

- Creation of a report card measuring norovirus preparedness among LTCFs.

The forthcoming White Paper will include an examination of control and prevention practices used in other portions of the country, with more detailed recommendations on how to proceed.

Appendices

Appendix 1
Meeting Invitees and Speakers

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Appendix 2
Meeting Agenda

Time	Content	Participants
9:00 am	**Welcome** • Welcome and introduction of topic • Introduction of moderators	Tom Eversole, Public Health Division
9:05 am	**Background** • Meeting purpose, intended results **Introductions** • Self introductions	Milnes Participants
9:20 am	**Background on the Issue**	Aron Hall, CDC
9:35 am	**Framing Discussion** • Panel discussion of stakeholders	• Lore Lee, OHA • Celeste Symonette, DHS • Sharon Faulk,LTCF-Admin • Pat Preston, LTCF-Infection Control • Amy Sullivan, LHD • TBA, Association
10:10 am	**Breakout Group Discussions** Group discussion:; Taking on the challenges • Group I: Institutional Policies, Practices & Procedures • Group II: Control Policies, Practices & Procedures • Group III: Prevention Policies, Practices & Procedures	Milnes/All participants
11:45 am	**Working Lunch** (Provided on-site)	
12:05 pm	**Solutions/Next Steps** • Participants review of group work (walk around) • Group discussion and prioritization • Planning next steps	Milnes/All participants
2:10 pm	**Closing Remarks**	Paul Cieslak, Public Health Division
2:20 pm	**Evaluation of Meeting**	Milnes
2:30 pm	**Adjourn**	

Appendix 3
Issues and Concerns

The following are the notes recorded by each of the three groups regarding issues and concerns.

Norovirus Institutional Issues and Problems

Issues:

1. **Admissions, Transfers, and Placement:**

   a. Issues/problems
      - Lack of complete & accurate information sharing
      - Financial impact in each facility
      - Inability to accommodate the patients with norovirus
      - No one person manages a patient from start to end

   b. Why still a problem?
      - There is a fragmentation in the whole system that allows this to persist

   c. What does ideal look like?
      - Complete and accurate information is conveyed between all
      - Continuity of care is managed
      - Financial reimbursement is assured

   d. Policies that contribute to the problem:
      - Lack of standardized policies/protocols
      - This applies also to floor closures

2. **Environmental Cleaning/Infection Control**

   a. Issues and contributing factors:
      - Ineffective education
      - Staff comprehension due to implementation shortcuts and lack of practice
      - Lack of effective monitoring of infection control measures
      - Staff turnover, resulting in less quality assurance

   b. What does Ideal look like?
      - Effective continuing education results in effective environmental cleaning

   c. Policies that contribute to the problem:
      - Lack of paid sick leave contributes to cycle of transmission
      - Punitive attendance policies contribute to cycle of transmission

3. **Visitors:**

   a. Issues/Problems:
      - Lack of transparency in communicating the nature of illness in the facility
      - Lack of understanding of norovirus

   b. Why still a problem?
      - Lack of understanding of norovirus

   c. What does ideal look like?
      - Residents and families understand Noro transmission and the need to enforce infection control measures

Norovirus Control Issues and Problems

Issues:

1. **Data Collection and Outbreak Investigation:**

   a. Issues/Problems:
      - What are the antecedents to clusters and impact of control
      - Difficulties with early detection
      - Lab turnaround time and expense of commercial testing

   b. Why is this still a problem?
      - Inconsistent communicating of knowledge and solutions among agencies and providers
      - Gaps between science and practice
      - Facilities don't know if reporting is required

   c. What would ideal look like?
      - Standardized surveillance by a standard group of trained staff
      - Facilities know to report
      - Rapid case confirmation to LHD and then to LTCF

   d. Policies that contribute to the problem:
      - Public and corporate policies that reduce funding for:
        - Infection control practitioners in facilities
        - Staff continuity
        - Public health support

2. **Control & Outbreak Response:**

   a. Issues/Problems:
      - Pressure on the system to accept patients
      - Staff turnover or well0trained staff

- Facility to facility flow of patients and related communications (most often hospital to LTCF)
- Variable LTCF response: some knowledgeable & responsive, others not
- County-to-County variability (surprise calls to regulators to stop admissions
- Statewide standards that are unsustainable by LHDs, leading to variable responses

b. <u>What would ideal look like?</u>
- ICP support in all facilities
- Improved communications
- Standardized responses with LTCFs and LHDs
- Sustainable responses

c. <u>What policies contribute to the problem?</u>
- Payment mechanisms
- Lack of standardized responses/guidance
- Legislation for protected information for nursing home surveillance (bed bugs)

3. **<u>Active Case Finding:</u>**

a. <u>Issues/Problems:</u>
- Case vs. Facility finding:
  - "Case finding" by LHD doesn't delay implementation of control measures?
  - "Facility finding" could delay implementation of control measures
- Case definitions
- Active vs. Passive case surveillance
  - Changes during o/b setting within facility
  - Responsibility of LTCF to LTCF

b. <u>Why is this still a problem?</u>
- Reduces time available for control measures
- Need good case definitions that are useful for facilities as well as for LHDs and the state
- CMS standardizes to CDC case definitions that may vary from state/LHD definitions because of the need for a workable definition

c. <u>What would ideal look like?</u>
- Better workable case and outbreak definitions for facilities, regulators and public health
- More uniform identification of facilities (Shared FTAG guidelines??)

d. <u>What policies contribute to the problem?</u>
- CMS staff standards

- Few resources for the elderly

4. **Identifying the End of Outbreaks**

   a. Issues/Problems
      - Collecting data to track the population and determine the end of the outbreak
      - State guidance
      - CDC guidance for onset of cluster is not as easy to interpret for the end of the cluster
      - Need better labs for testing

   b. Why is this still a problem?
      - Challenges in differentiating between explained vs. unexplained diarrheal illness
      - New admissions are held until end of outbreak can be declared

   c. What does ideal look like?
      - Ability to clearly determine the end of outbreaks

   d. Policies that contribute to the problem:
      - Different CMS and CDC definitions
      - Lack of policy on patient consent to go to a facility that is having an outbreak (noro/flu/etc.)

5. **Personal Protective Equipment:**

   a. Issues/Problems:
      - Contact precautions for LTCFs inconsistent
        - Flexible gown and masking requirements
        - Droplet precautions??
      - Impact on patient care
      - Variability in LHD to LTCF recommendations

   b. Why a problem?
      - Complex nature of Noro transmission
      - Unclear guidelines
      - Decreased time with caregiver, discomfort for resident to be cared for by gowned and masked person

   c. What does ideal look like?
      - Standardized, consistent use of clear guidelines
      - The public is educated about control measures

   d. Policies that contribute to the problem:
      - Corporate and public health policies are inconsistent

Norovirus Prevention Issues and Problems

Issues:

1. **No Standardized prevention practices:**

   a. Issues/Problems:
      - Need to educate because of staff turnover rates
      - Need to provide tools (line library, cohorting rules, reporting needs)
      - Consider roles of personnel (include environment health professionals)
      - Define the role of public health for prevention
      - Is a statute needed for this?
      - Need unified communications and messaging for families
      - Should have consistent expectations regarding care and prevention in all facilities
      - Should develop consistent hand washing practice recommendations
      - Letter written before outreach
      - Provide an admissions packet before admitting patients
      - Get to know all our partners

   b. Potential Prevention Policies
      - LTC "Patient Handler Cards"
      - Consistent education messaging via a toolbox
      - Consider a statute or changes to current practices
      - Consider changes to licensing/permitting process
      - Consider models used for other diseases/outbreaks

Appendix 4
Recommendations from the Meeting

Norovirus Institutional Group Recommendations

1. **Admissions and Transfers**

    a. Who needs to be involved?
        - Hospitals
        - LTCFs
        - State agencies
        - Payors

    b. Recommendations:
        - Adopt policies or protocols that create financial disincentives for the discharge or transfer of patients without accurate communication of Noro risk
            - Financial incentive for full disclosure, as measured by decreased negative outcomes
        - Create and employ standardized transfer form that addresses communicable disease status/risk with a CD screening section.
        - Change complex med add on policies (cough/fever/nausea/vomiting/diarrhea) to provide incremental additional payment for limited duration under Medicaid
        - Change complex med add on policies (cough/fever/nausea/vomiting/diarrhea) to provide incremental additional payment for limited duration under Medicaid for norovirus illness

    c. Evaluation components:
        - Measure decrease rates of negative outcomes

2. **Environmental Cleaning/Infection Control:**

    a. Recommendations:
        - Adopt procedures that are vetted/evidence based…. Or the best we know
        - Create a resource library at/for state and local health departments
            - Trainings
            - Videos
            - Posters

- Establish Quality Improvement programs for education programs related to infection control practices adapted for use within LTCFs

b. Resources needed:
   - State dedicated staff at the state/LHD to create this resource
   - Support for LTCF staffing for increased infection control role for QI/QA

Norovirus Control Group Recommendations:

1. Establish a consistent Definition of "Case" and "Outbreak"

   a. Background Examples:
      - CDC Guidance and existing CMS standard:
        - Individual with loose stool 3 times in 24 hours
        - Two residents with the above withing 48 hours, both of which are confirmed.
      - Oregon state for acute GI:
        - Acute onset of vomiting/diarrhea or both without another cause
        - Acute outbreak of GI: an unusual number of employees or patients/residents with acute GI clustered by time and place
        - Working definition of outbreak in LTCF: Two patients/residents in same LTCF or same hospital unit within 96 hours of each other.

   b. Questions: Who should or does establish reporting rules? Not CDC. It is the state/CSTE

   c. Communicating to/with LTCFs
      - Staff Turnover
      - Administration vs. director of nursing?

2. Identify communications lists/plans that allow public health recommendations to be consistently communicated from the state to LTCFs with LHDs and licensing/inspection agencies in the loop and that assures consistent information flow

3. Provide education with CMEs for LTCF nurses/staff/licensed persons on disease reporting and acute GI outbreak responses
   a. Consider using OSHA consultative model or an Oregon OSHA state collaborative
   b. Include MDRO training

4. Legislation to protect reporters of acute GI outbreaks in LTCFs

a. Still need a explicit model (i.e. start with population spread of noro) related to data collection and investigation: who does what and what is the responsibility to assure completion of information
    - By state public health/LHDs
    - Sustainability and when need to investigate

Norovirus Prevention Group Recommendations:

1. **Infection Control Measures Recommendations:**

    a. Tool kit on how to handle an outbreak
        - Hand washing
        - Signage
        - How to clean during outbreak
        - Reporting
        - Location of sinks, paper towels, etc.

    b. Mandatory communication from hospital to facility re infectious status

    c. Case finding: Use active surveillance by facility through TA by public health
        - Community announcement by LHD of virus presence in the community.
        - Define the criteria for an alert – how many cases? What general statement should be used?
        - Provide feedback to facilities when outbreak ends

    d. Advocate for creation of a report card on Norovirus preparedness in LTCFs (not including adult foster care)
        - Include all partners in its development, including provider representation too)

2. **Next Steps: Convene a workgroup**

3. **Resources Needed:**

    a. Staffing resources to develop consensus and recommendations

4. **Measures:**
    a. Report is a scoring system. A higher score shows success
    b. Sorter duration of outbreaks and decreased infections
    c. Possible increase in reporting rates

Appendix 5
Summary of Recommendations by Category

Recommendation	Priority?	Feasible?	Willing to Help?	Have Resources?	Comments
Definitions					
Create workable case & outbreak definitions for use by all					
Clear guidelines for declaring end of outbreaks					
Establish consistent definition of "Case" and "Outbreak"					
Define criteria for public alerts and content of general statements					
Standardization					
Standardize surveillance methods					
Standardize responses of LTCFs and local health departments					
Increase uniform identification of facilities (shared FTAG guidelines)					
Standardize use of personal protective equipment					
Create/implement standardized patient transfer form					
Procedures & Protocols					
Speed up case confirmation process					
Increase support for Infection Control Professionals in LTCFs					
Create/implement LTC "Patient handler cards"					
Adapt models used for other diseases/outbreaks					
Revise procedures to reflect evidence-base where possible					
Increase TA by local health depts. For active surveillance in LTCFs					
Communication					
Clarify and reinforce reporting requirements					
Improve communications between public health & LTCFs					
Create communication plan for consistency: PH, Licensing/LTCFs					

Local Health Depts. Communicate virus presence in the community					
LHDs and state PH provide LTCF feedback when outbreak ends					
Education					
Expanded education of the public about control methods					
Create a tool box to support consistent education/messaging					
Create a resource Library for/at state and local health departments					
Establish QI programs for LTCF education programs re infection control					
Provide education with CMEs for LTCF licensed staff					
Create a tool kit on how to handle aspects of a Norovirus outbreak					
Create a report card on Norovirus preparedness in LTCFs					
Legislations/Mandates/Policies					
Create legislation to change current practices/licensure					
Create financial incentives for accurate discharge information					
Revise complex med add-on policies under Medicaid					
Create legislation to protect reporters of GI outbreaks in LTCFs					
Mandate hospital communication of infectious status on discharge					

Appendix 6
Notes from Follow-up Conference Calls

January 6, 2014

Participants:

Rae Parlier, Yamhill County
Brittany Sande, OHA/PHD
Tom Eversole, OHA/PHD
Tom Milne, Milne & Associates
Jan Rodriguez, Clackamas County
Paul Cieslak, OHA/PHD
Casey Milne, Milne & Associates

Purposes of Meeting:

- To follow-up from the September 30 Norovirus meeting
- To get feedback on the draft report from the meeting, with a focus on identifying priorities
- To help determine next steps

Key Points from the Call:

- The report, as written, is a little overwhelming; a lot of information!
- Yamhill County conducted a round table discussion with LTCFs and other SNFs in December. While the turnout was small, there was very constructive conversation with hospitals and others, and the meeting generated a sense of cooperation. Conclusion: communication and getting people involved are two important strategies in norovirus prevention and control.
- While training is important and needed, mandates are not appreciated.
- Assisted Living facilities and foster homes need help
- Clackamas County has a norovirus outreach program, providing outbreak packets to facilities. The county has done an in-service on NV (40-50 attended) and has provided trainings in facilities. They have a list of facilities that seem to have challenges with NV. They have engaged about 90% of the care facilities in the county.
- Clackamas County would be willing to share the outbreak packets with others.
- Hospitals and LTCFs use different standards to handle outbreaks, with hospitals generally employing stricter standards.
- Employing common standards would be helpful, particularly when transferring patients with GI symptoms. Generally, LTCFs provide information to hospitals, but this is less likely when patients are transferred from Assisted Living facilities to hospitals.

- A difference exists between state standards regarding identifying the conclusion of outbreaks and those that are used by at least some local health departments. The state standard is 48 hours after last date of onset; Clackamas County uses 2 incubation periods after date of last onset (96 hours).

- The State indicated that it would be very open to modifying its guidelines, noting that the inconsistency among LTFCs may be a symptom of the general lack of demonstrating effective means of controlling outbreaks and defining the end of outbreaks. It may be advisable to collect corporate policies to help find what works.

- Some of the language in the report seems to imply failure - inconsistent practices, lack of common approaches, etc. Those are probably the result of a general lack of practices acknowledged in the field to be effective. Reword these references to a more positive phrasing.

- While isolation may work fairly well in hospitals, it doesn't work in all LTCFs, where "patients" are considered residents, and the services are provided via a "social model" as opposed to a "medical model." Using education and seeking patient and family cooperation is a preferred route to take.

- The State is interested in learning how it can add value in communications about guidelines, tool kits, novel practices, etc.

- The idea of providing a matrix description of approaches that could work in different settings (e.g. hospital, SNF, RCF, CCRC, Assisted Living, Foster Home, etc.), given the difference in resources, was well received. Clarifying what a facility could do to get results vs. what they "should do." Help make a transition from rules to supportive guidelines.

- The State agreed with the above point to help facilities understand how to do the best feasible job with the resources they have based on lessons learned. For example, "how to do (X) when you are down to 1 staff person…."

- A LTCF in Yamhill County conducts an Active Surveillance of its residents every day and this has heightened awareness.

- There was positive response to a suggestion that the state create a website place to gather best practices relating to norovirus control and prevention

- As an expansion on some of the ideas above, cluster best practices and suggested approaches by domain:
  The Guidelines say, "….."
  This is how:
  SNFs do it

RCFs do it
Assisted Living Facilities do it
Foster Homes do it
(etc.)

- The website could include "Tools for Us"…. With a menu to select from
- Perhaps separate tools by provider type:
  - ☐ Nurse's aide/Medical aide
  - ☐ LPN
  - ☐ RN
  - ☐ PT
  - ☐ OT
  - ☐ CD Nurse
  - ☐ Administrator
  - ☐ (etc. with a click leading to their respective tools)
- The meeting ended at 1:40 with Thanks from Tom Eversole, and a few positive comments about the utility of the meeting.

January 10, 2014

Participants:

Pat Preston, CGIC
Joellyn English, Tillamook County
Katrina Hedberg, OHA
Jennifer Vines, Washington County
Amy Sullivan, Multnomah County
Paul Cieslak, OHA/PHD
Casey Milne, Milne & Associates
Sharon Hofer, Washington County
Eric Mone, Deschutes County
Mary Post, Oregon Patient Safety Comm.
Allyson Smith, N.Central Public Hlth Dist.
Brittany Sande, OHA/PHD
Tom Eversole, OHA/PHD
Tom Milne, Milne & Associates

Purposes of Meeting:

- To follow-up from the September 30 Norovirus meeting
- To get feedback on the draft report from the meeting, with a focus on identifying priorities
- To help determine next steps

Key Points from the Call:

- The report is exhaustive and great launching for moving forward
- There are some OHA offices mentioned in the report that are not correctly named… will provide the correct names. (*Corrected in Report)*
- Under the Recommendations, Procedures & Protocols section, what iare "Integrated Care Protocols". ***This should be corrected to Infection Control Professional.*** (*Corrected in Report)* In the same section, what are "Patient

Handler Cards?" This was suggested at the 9/30 meeting, but no one on the call was familiar with them.

- Under the Education section, Allyson indicated that creating tool kits for handling outbreaks should be a priority and expressed willingness to work with other in developing them. Sharon expressed an interest as well, indicating that she has been looking at tool kits from other states and felt a work group might put one together for Oregon. Good placement for a tool kit would be on a Norovirus page on the OHA Website.

- Amy indicated they have a packet for investigating and communicating with facilities that helps guide education along a "Who, for What, When" framework. It is important for facilities to have advance information in order to start preparing. Also, information for family members is very important.

- Pat suggest that as counties get together, they should focus on standardizing tool kits so that the kits and responses are the same in all counties.. He indicated there is great variation between counties

- Discussion followed about how to get buy-in from all PH leaders in accepting a tool kit. It was suggested that having a tool kit and/or guidelines reviewed by CLHO-CD is a good way to get buy-in, and that OR-EPI can do the training. (CD nurses are required to do trainings at least once every 3 years).

- In response to a question about what he meant by variance beween counties, Pat gave several examples from his experience around the state:
    - Should facilities close a wing or the entire facility
    - Some believing that recommendations are requirements and following them precisely
    - Variability in terms of when a facility believes it can reopen after an outbreak closure
    - Variation in when and whether to use bleach

  Pat suggested that the CDC guidelines be used by any committee to base tool kits and recommendations/guidelines on.

- Amy suggested that it would be great to have a statewide group involved, and to note that occasionally Oregon is ahead of CDC.

- Paul suggested that providing training for LTCF nurses with CE units and incentives is a realistic objective, and that OHA could start looking for resources to do that. Pat indicated there are three groups in the state capable of doing the education/training: The Oregon Safety Commission, The Oregon Leading Age groups for non-profits, and the Oregon Health Care Agency.

- Casey suggested that having training available for folks not able to attend and for non-nurse employees would be important. She noted that the Institute for Health Care Improvement suggests that providing training when there is

a need to know is most effective. Pat suggested that the Oregon Foster Home Association cold help, and that partnerships with facility owners for trainings is another route. Additional comments included the need to provide training for visitors/family members. It was suggested that for now it is not a good idea to include trainings for day care centers.

- Other issues that were not addressed in the report and should be include:
  - Restriction of access during outbreaks
  - Warnings to visitors, signage, etc.
  - Cohorting
  - Other approaches to minimize spread of infection, even if not 100% effective.

- In response to the ideas above, Amy suggested these are the core things to be addressed, and perhaps part of the tool kit to be developed, and especially to address information needs of family members. Communication strategies in addition to signage would benefit family members.

- Joellyn indicated that the environmental health staff in Tillamook County are very hands-on during outbreaks, addressing cleaning, signage, etc.

- Pat pointed out that for SNFs are required by CMS and OSHA to have signage on the front door. It was noted that Assisted living facilities don't like signs for PR and aesthetic reasons and generally don't place them on front doors to warn visitors of infectious status.

- It was noted that facilities that have different levels of care face challenges regarding posting and other guidelines and requirements.

- Paul suggested that having a brief 30 minutes video or YouTube educational clips would be useful in providing educational pieces to staff, patients/residents, and families/visitors.

- It was noted that the areas in the report under Recommendations: Education were quite general. Where/when do we address content and standardization? How/where does that get added to the document? Allyson suggesting taking the tool kit and perhaps training ideas to CLHO to discuss the ideas and need (including need for standardization), and THEN create the content. Get agreement first. Paul added that having a robust conversation about best practices among local health departments would be helpful.

- It was noted that guidelines pertaining to cohorting are already defined and included in a state document.

Participants were thanked by Tom Eversole for their participation.

Appendix 7
Meeting Evaluation

	Poor				Great
Meeting Arrangements:	1	2	3	4	5
Advance notice of the meeting			3	3	12
Materials were helpful				7	9
Room Accommodations			3	3	10

Comments: Thanks for lunch. I was a late addition, so probably missed advanced materials.

	Poor				Great
Flow of Meeting:	1	2	3	4	5
Started on time			1	6	10
Clear Objectives for meeting		1	2	5	9
Agenda followed or appropriately amended			1	4	12
Facilitation was effective			2	2	13
The "right" people were at the meeting			1	5	10

Comments: I especially liked the fact that non public health representatives were present. Wish we had more LTCF representation. Needed ("right" people) to stay throughout the process, not come & go. More LTC would be helpful. Outstanding.

	Poor				Great
Utility of Meeting:	1	2	3	4	5
Stated purposes of meeting were met			2	5	10
Dialogue was useful				5	12
I support the group's recommendations			2	8	5
Next Steps are clear	1	3	5	6	2
Meeting was a good use of my time			3	8	6

Comments: Recommendations need more fleshing out! Potential solutions and next steps are unclear. Sorry - a lot of competing needs. Action plan desired but. A great start that hopefully will lead to continued efforts.

What worked? Great group of people to work with. Groups. Great team, wonderful facilitation. Great group from different (sectors). Excellent time management, structured group work, great room, appreciate the healthy lunch. Group work. Tables with (about) 8 each - workable group size. Multiple agencies & disciplines. Positive, collaborative environment.

What could be better? We simply need a little more time to spend with all of our recommendations & polish them for further adoption. Clearer direction on "worksheets" outlines were vague. Not enough time for topics that were introduced. Perhaps a baseline overview of all our groups. Need clear next steps to impact Oregon, reducing noro outbreaks. Objectives were ambitious for this meeting - need follow up. All groups should have had a moment to intermingle. Needed time to ponder other groups' recommendations. More time.