IMPACT DUPAGE
DRIVING DUPAGE FORWARD

Local System Assessment
PHASE Three

2022 Assessment

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Background

In January and February 2022, Impact DuPage and its partners engaged in an assessment of the health of DuPage County utilizing the Mobilizing Action for Planning and Partnerships (MAPP) collaborative process. The MAPP model for Community Health Assessment (CHA) and planning includes four different assessments that provide a comprehensive picture of health in an area.

To complete the Local Public Health System Assessment (LPHSA) of MAPP, Impact DuPage utilized the National Public Health Performance Standards (NPHPS) Local Public Health System Performance Assessment Instrument Version 3. The LPHSA helps to describe how well the public health system works together to deliver the 10 Essential Public Health Services (Essential Services) and opportunities for improvement. These Essential Services (ES) are utilized in the field to describe the scope of public health and listed in the "Assessment Framework" section of this report.

Public Health System Partners
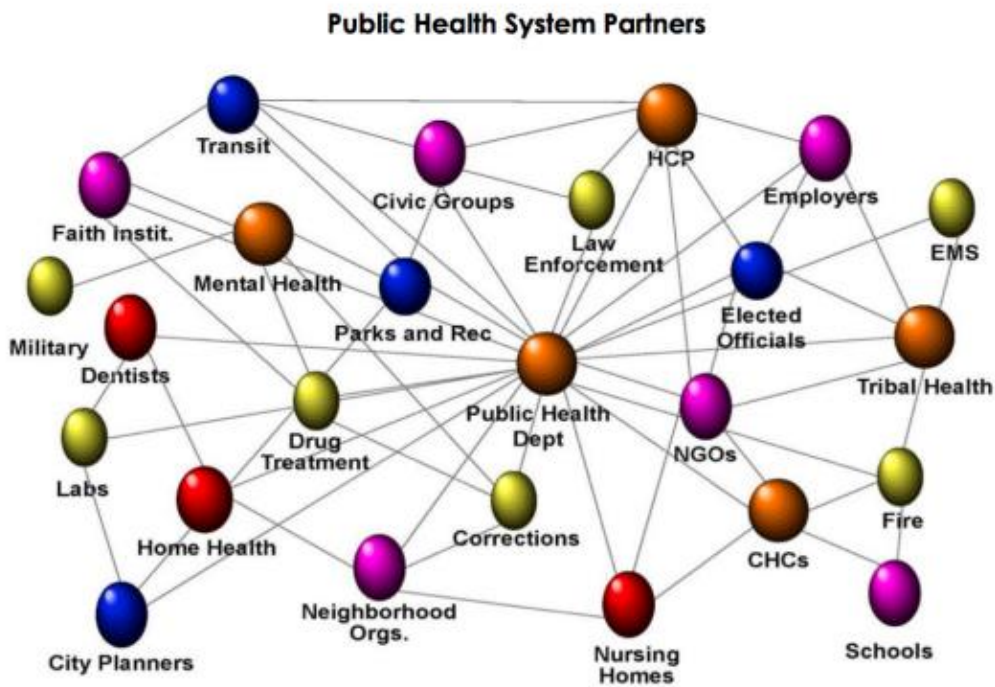
Assessment Framework

The LPHSA measures the collective efforts of the public health system. The instrument is framed around the 10 Essential Public Health Services (10 EPHS) framework, which was developed in 1994 by a federal working group and serves as the description of activities that public health systems should undertake in all communities. These include:

1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable
8. Assure a competent public health and personal healthcare workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems

Assessment Approach

Impact DuPage commissioned Conduent Healthy Communities Institute (HCI) to assist with this LPHSA and author this summary report. Conduent Healthy Communities Institute's mission is to improve the health and environmental sustainability of cities, counties and communities through services and technology. HCI supports hospitals and health departments in meeting their CHA requirements.

To complete this LPHSA, Conduent HCI conducted four distinct online surveys and facilitated conversations, each focusing on two to three ES.

Impact DuPage reached out to colleagues, partners and other community organizations involved in the public health system to encourage them to take the surveys and invited them to participate in the follow up live discussions. Representatives from various sectors of the public health system participated including public health, local hospitals and health systems, mental and behavioral health, education, housing, public safety, local government, local nonprofit, and faith-based organizations.

Each discussion included between nine and thirty-two stakeholders from various sectors within DuPage County's public health system. Conversations were led by a facilitator with support from a content expert and notetaker from Conduent Healthy Communities Institute (HCI).

ES Topics	Survey Live Dates	Number of Respondents	Discussion Date	Number of Participants
Monitor, Diagnose, and Investigate (ES 1, ES 2)	01/03/22 – 01/18/22	12	01/25/22	17
Inform, Educate, and Empower (ES 3, ES 4, ES 7)	01/03/22 – 01/18/22	39	01/27/22	22
Policy, Planning and Regulations (ES 5, ES 6)	01/03/22 – 01/18/22	11	02/01/22	14
Workforce, Research and Evaluation (ES 8, ES 9, ES 10)	01/03/22 – 01/18/22	6	02/03/22	8

The discussions included a brief overview of MAPP and purpose of the LPHSA. Participants were then led through a discussion focused on the DuPage County public health system covering the following topics: review of survey results, discussion of current activities, health equity considerations, strengths, weaknesses, and near and long-term improvement opportunities for each ES. Notes were captured live during the online discussions and shown through a digital interactive whiteboard. This process allowed participants to ensure their thoughts were captured accurately and request adjustments to the notes in real time as needed.

Survey Scoring

Each ES was scored by participants to assess public health system performance on the components of each service. Respondents were asked to rate "At what level does DuPage County's public health system conduct each ES standard and activities" using the following scale:

Optimal Activity (76-100%)	The public health system is doing absolutely everything possible for this activity and there is no room for improvement.
Significant Activity (51-75%)	The public health system participates a great deal in this activity and there is opportunity for minor improvement.
Moderate Activity (26-50%)	The public health system somewhat participates in this activity and there is opportunity for greater improvement.
Minimal Activity (1-25%)	The public health system provides limited activity and there is opportunity for substantial improvement.
No Activity (0%)	The public health system does not participate in this activity at all.

Essential Health Service Survey Scores and Ranking

Based on survey responses, ES 1, 2, 3, 4, 6, 7, 8, and 9 fell into the "Significant Activity" range for activity. The score for ES 5 put this service into the "Optimal Activity" range. While the score for ES 10 put this service into the "Moderate Activity" range. The overall score for the system was 63.8, placing it in the "Significant Activity" range.

Essential Health Services Scores

Service	Score
Cumulative System Performance Score	63.8
Essential Service 1: Monitor Health Status	67.1
Essential Service 2: Diagnose and Investigate	73.5
Essential Service 3: Educate and Empower	62.4
Essential Service 4: Mobilize Partnerships	67.1
Essential Service 5: Develop Policies and Plans	76.6
Essential Service 6: Enforce Laws	74.0
Essential Service 7: Link to Health Services	59.9
Essential Service 8: Assure Workforce	56.1
Essential Service 9: Evaluate Services	61.0
Essential Service 10: Research and Innovation	40.0

The following table includes the score for each ES as well as the overall ranking from highest to lowest based on survey results.

ES	Essential Public Health Services Description	2022 Score	Overall Ranking
Summary of Scores and Ranking			
1	Monitor health status to identify community health problems	67.1	4th
2	Diagnose and investigate health problems and health hazards in the community	73.5	3rd
3	Inform, educate, and empower people about health issues	62.4	6th
4	Mobilize community partnerships to identify and solve health problems	67.1	5th
5	Develop policies and plans that support individual and community health efforts	76.6	1st
6	Enforce laws and regulations that protect health and ensure safety	74.0	2nd
7	Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable	59.9	8th
8	Assure a competent public health and personal healthcare workforce	56.1	9th
9	Evaluate effectiveness, accessibility, and quality of personal and population-based health service	61.0	7th
10	Research for new insights and innovative solutions to health problems	40.0	10th
Overall LPHS Performance Score:		63.8	

Essential Service Assessment Results

The following sections offer detail by ES including:

- ES Definition and Standards
- Survey Results Describing Level of Activity
- Summary of Current Activities and Strengths, Weaknesses, and Opportunities

Essential Service 1: Monitor Health Status to Identify Community Health Problems

ES 1 is composed of the following standards:

- 1.1: Population-Based Community Health Assessment
- 1.2: Current Technology to Manage and Communicate Population Health Data
- 1.3: Maintaining Population Health Registries

Survey Results

Essential Service 1

Essential Service 1 Overall Score	67.1
Standard 1.1: Population-Based Community Health Assessment (CHA)	72.1
Standard 1.2: Current Technology to Manage and Communicate Population Health Data	65.2
Standard 1.3: Maintaining Population Health Registries	64.1

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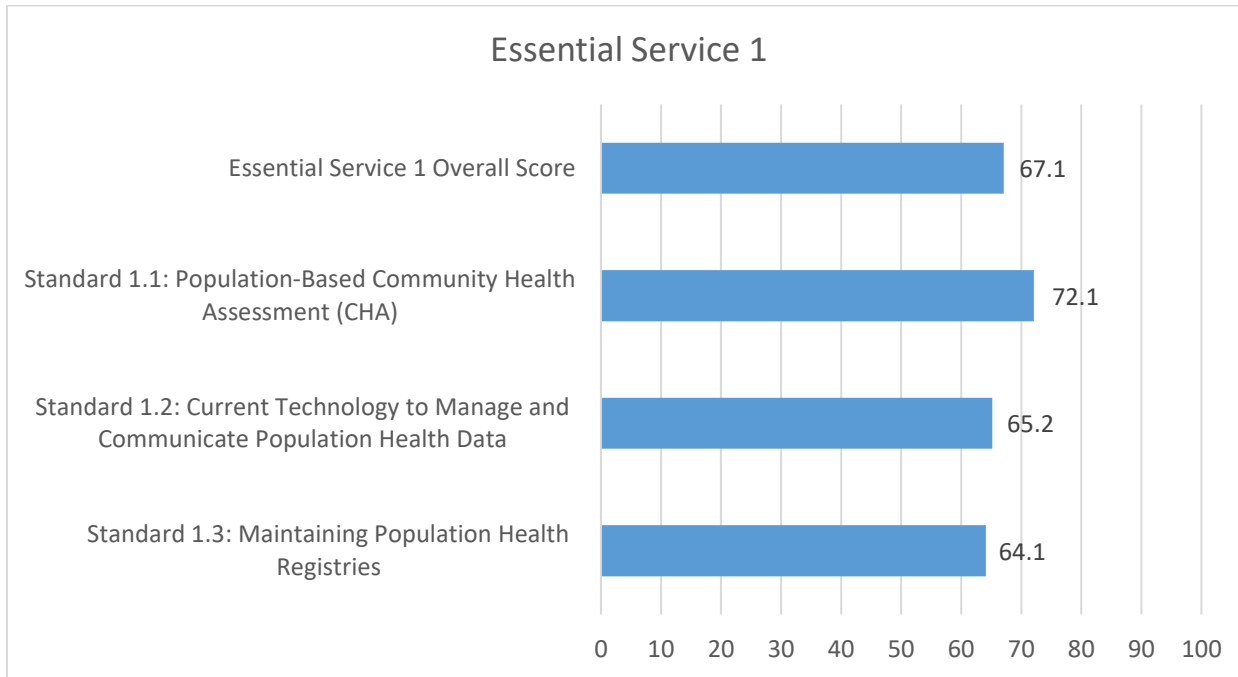
The overall score for ES 1 based on responses by twelve survey responses was 67.1 and ranked fourth highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for the standards making up ES 1 all scored in the "Significant Activity" range.

Essential Service 1 Current Activities Summary

To better understand ES 1 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on January 25, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, non-profits, behavioral health, research, education, housing, public safety, and religious/faith-based organizations. Seventeen participants reviewed the ES 1 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 1.1, Population-Based Community Health Assessment (CHA) (Score: 72.1, Significant Activity). This standard explores the extent to which the local public health system regularly assesses the health of the community, updates the CHA, and promotes the use of the CHA among community members and partners. Participants shared that there are existing collaborative opportunities to work together to implement CHA and that there is available data and technology to support these processes.

Standard 1.2, Current Technology to Manage and Communicate Population Health Data (Score: 65.2, Significant Activity). This standard explores the performance of the local public health system in using technology and methods to combine, analyze, and show data for health and public health data. The Impact DuPage website(www.impactdupage.org) was identified as a key community resource that includes priority areas, data, and dashboards that track community progress. The platform is leveraged by the health department, health systems, and community organizations to conduct needs assessments, track progress and impact, and support grant writing.

Standard 1.3, Maintaining Population Health Registries (Score: 64.1, Significant Activity). This standard explores the extent to which data are regularly collected to update population health registries and the extent to which data from these health registries is used to inform the CHA and other health analyses. Participants noted that DuPage County has access to a number of data repositories for assessment and planning purposes including the Impact DuPage website, COVID-19 dashboard, Immunization Registry, as well as access to additional state databases.

ES 1: Monitor Health Status to Identify Community Health Problems Current Activities Summary Table	
• Undertaking community health needs activities together. • Impact DuPage contains all six hospitals, so collaboration is significant in leveraging existing resources. • Available technology: Data available on Impact DuPage community data portal; indicator management. • Utilization of data to develop strategic priorities and initiatives across the county. • Using the health department data and surveillance-based data at different levels.	• Creation of COVID-19 dashboard to communicate data (i.e. integration of data from hospitals, health departments, the state etc.) • Access to additional state databases to supplement data (i.e. hospital discharge data). • Linking individuals to food resources, highlighting coordination between different partners in case investigation and contact tracing. • Immunization registry (i.e. tool to track progress); but also seeing gaps in linking data to vaccination status and exposure risks.

Essential Service 1 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 1 and what they know to be currently in place, participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
- Collaboration among key partners.   - Community based coalitions not affiliated with hospitals and health departments are interested in data (i.e. utilizing zip code level indicators from Impact DuPage).   - Expectation that data be current and updated frequently.

Weaknesses
- Language barriers; not having data for Middle Eastern and North African populations.   - Evaluation – looking at where COVID-19 infection and vaccine rates are highest and lowest to see where support is needed; shows the gaps in data (geographically and for specific populations).   - Expectation has changed rapidly through COVID-19. There is so much interest and demand for data to be available publicly in near real-time.   - Challenges with health equity data during COVID-19 and overlaying it with additional data.   - Some data gaps in relation to equity and language barriers; dissemination becomes difficult.

Near-Term Improvement Opportunities
- As much data as possible at the zip code level and municipality level that helps inform policy makers; "Hyperlocal opportunities to find and report data."   - Repurposing Data: Interesting impact on organizations of the push and pull of information (i.e. leveraging data for specific purposes).   - Pushing data out is easier than pulling data in. Illinois Department of Public Health (IDPH) Siren Alerts sending out data is helpful (not community specific as data is high-level).   - Emergency department pediatrics impact assessment could be used across agencies outside of the hospital.

Long-Term Improvement Opportunities
- Working to create more accessible data (i.e. data literacy).   - Leveraging coalitions to advocate and interface with policy makers to push to have data barriers removed collectively (better accessibility, more representative data).   - Northwestern pilot program with the Department of Health and Human Services, Emergency Preparedness and Response to develop hazard vulnerability assessment; data only model utilizing census data and national weather.   - Keeping the "End-User" in mind.

Essential Services 2: Diagnose and Investigate Health Problems and Health Hazards in the Community

ES 2 is composed of the following standards:

- 2.1: Identifying and Monitoring Health Trends
- 2.2: Investigating and Responding to Public Health Threats and Emergencies
- 2.3: Laboratory Support for Investigating Health Threats

Survey Results

Essential Service 2

Category	Score
Essential Service 2 Overall Score	73.5
Standard 2.1: Identifying and Monitoring Health Threats	68.2
Standard 2.2: Investigating and responding to the public health threats and emergencies	73.8
Standard 2.3: Laboratory support for investigating health threats	78.5
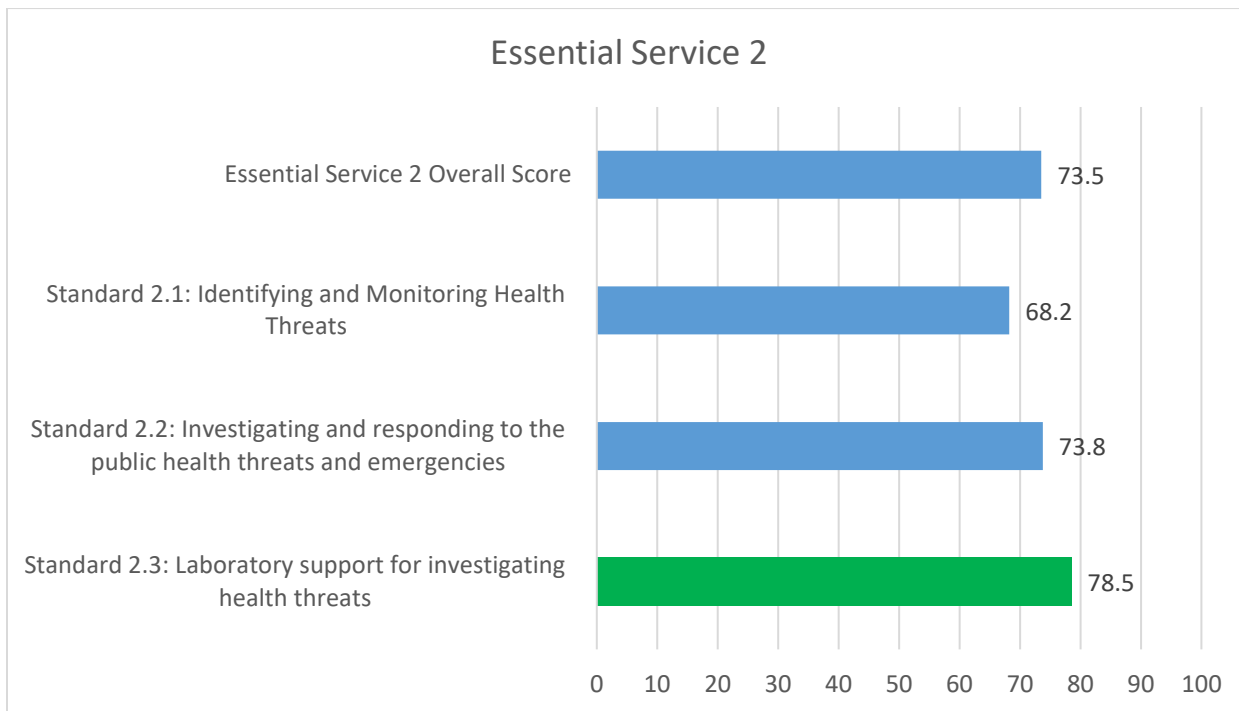
The overall score for ES 2 based on responses by twelve survey responses was 73.5 and ranked third highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for Standards 2.1 and 2.2 scored in the "Significant Activity" range. Standard 2.3 scored higher in the "Optimal Activity" range.

Essential Service 2 Current Activities Summary

To better understand ES 2 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on January 25, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, non-profits, behavioral health, research, education, housing, public safety, and religious/faith-based organizations. Seventeen participants reviewed the ES 2 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: *The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.*

Standard 2.1, Identifying and Monitoring Health Trends (Score: 68.2, Significant Activity). This standard explores the performance of the local public health system to monitor and identify outbreaks, disasters, emergencies, and other emerging threats to public health. Participants described the DuPage Public Health System's successful response to the changing needs of the community during the COVID-19 pandemic as with recent foodborne outbreaks. These responses have necessitated stronger collaborations and a more reactive system to successfully meet the health needs of the community.

Standard 2.2, Investigating and Responding to Public Health Threats and Emergencies (Score: 73.8, Significant Activity). This standard explores the performance of the local public health system in collecting and analyzing data on public health threats and responding to emergencies. Participants shared that the public health system in DuPage County has been successful responding to COVID-19 and recent foodborne outbreaks. That the system was responsive to changes in vaccine needs, testing capacity, and testing results turnaround times.

Standard 2.3, Laboratory Support for Investigating Health Threats (Score: 78.5, Optimal Activity). This standard explores the performance of the local public health system in collecting and analyzing data on public health threats and responding to emergencies. The survey results put laboratory support for investigating health threats in the significant range with a score of 78.5 in the "Optimal Activity" range. Participants noted that laboratory services at the local level have been strengthened during COVID-19 but that there are still challenges with demand for testing.

ES 2: Diagnose and Investigate Health Problems and Health Hazards Current Activities Summary Table	
• Municipalities using hospitalization numbers of patients in ICU to show level of risk (helpful but also can limit perspective on what's happening around the broader community). • Greater understanding of what public health is. • COVID-19 has increased the business community's interest in local data, in addition to the community's interest. • Pulling different data sources related to mental health, especially adolescent mental health; including the Illinois Youth Survey (IYS), Impact DuPage, Hospitalization and ER data, Crisis Text Line. • Fruitful collaborations between hospital, police department, fire department, and community organizations have ramped up during COVID-19 (learning through data and giving people tools for future public health). • Response to COVID-19 (i.e responding to changes in vaccine needs, testing capacity and turn-around time).	• The health department is usually a safety net and COVID-19 pushed the agency into a more active role in working with community partners (i.e. surge capacity in mobile testing efforts). • Different role with health departments: how to get testing done, how to get patient samples, how to get information out there, how to get results back (hospitals did not have testing). • COVID-19, foodborne outbreaks, communicable disease: robust system with health systems and laboratories to effectively evaluate samples and testing. • Recent foodborne outbreak: state lab was no longer doing testing, but Northwestern Central DuPage did; created opportunities to strengthen networks.

Essential Service 2 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 2 and what they know to be currently in place, participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.
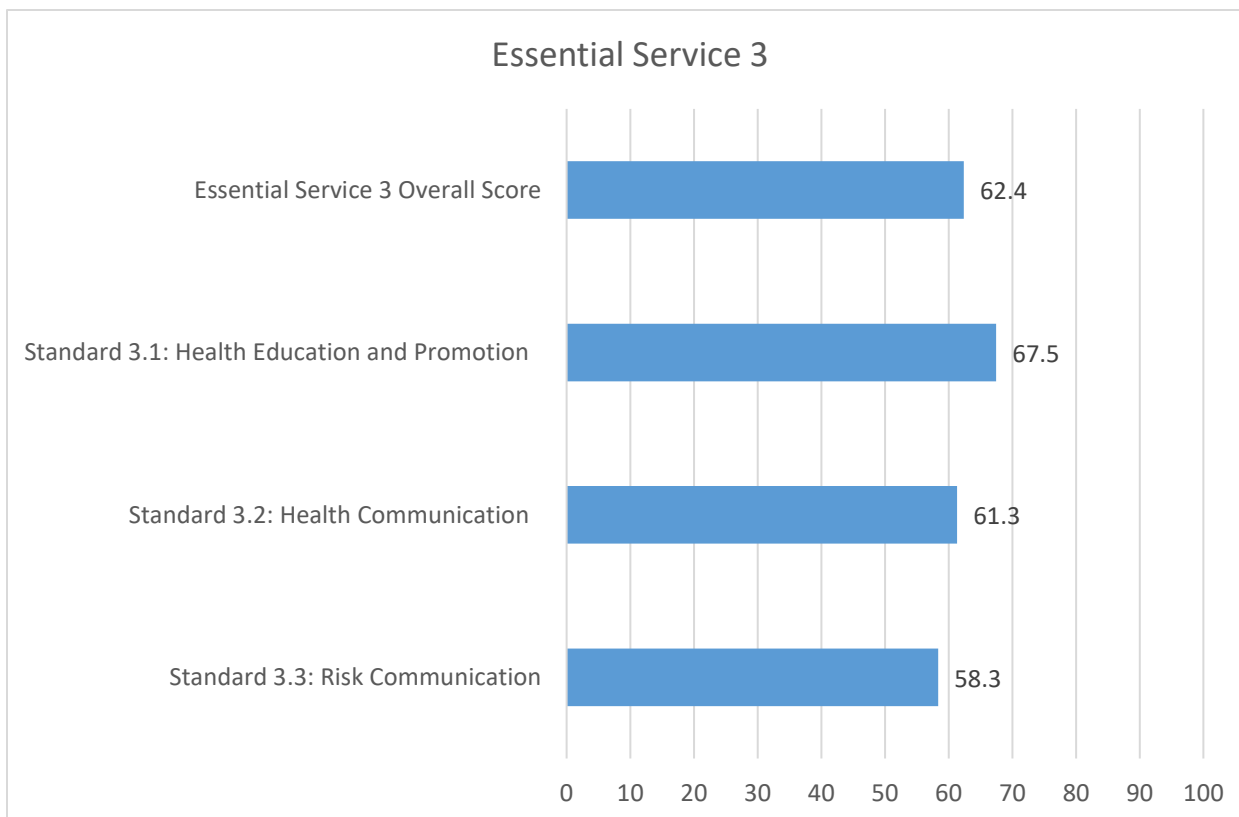
Strengths
• Proximity to Chicago allows DCHD to tap into IDPH testing can forward to Centers for Disease Control and Prevention (CDC); proximity to hospital networks and systems.
• Good coordination with different levels of hospital staff; regular meetings with hospital administrative staff, emergency departments, and pharmacies.
• Influx of new private labs was a strength to meet the need during COVID-19, but also brought challenges with communication and potential for scams.

Weaknesses
• Demand for COVID-19 testing which was unable to be met during Zika and Ebola. With any new emergence of a communicable disease, testing capacity and infrastructure is a weakness.
• New emerging threats mean it takes time to build best practices; what is the appropriate test to run? Who has reagents? What is the best specimen to collect?
• Genotyping for COVID-19 variants: doesn't change the way you treat patients but when results came in it would be helpful for hospitals to know when the variant showed up and where.
• How many different specimens should be collected? What is the appropriate paperwork for the patient to fill out? Transferring from CDC to IDPH was a different format to learn (i.e. what type of specimen to send).

Near-Term/Long-Term Improvement Opportunities
• Advocacy for public health lab infrastructure (i.e. access to most advanced technology and facilities to meet demands).
• Policy and structure group to address emergency response "Command Center" that meets regularly not only when there is a crisis. Planning ahead and creating a protocol for the hospital group as well.
• Playbook: bridging different entities together to periodically discuss the supplies needed; where pharmaceuticals are kept; standard operating procedures, etc.

Essential Services 3: Inform, Educate and Empower People about Health Issues

ES 3 is composed of the following standards:

- 3.1: Health Education and Promotion
- 3.2: Health Communication
- 3.3: Risk Communication

Survey Results

Essential Service 3

Category	Score
Essential Service 3 Overall Score	62.4
Standard 3.1: Health Education and Promotion	67.5
Standard 3.2: Health Communication	61.3
Standard 3.3: Risk Communication	58.3

The overall score for ES 3 based on responses by thirty-nine survey responses was 62.4 and ranked sixth highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for the standards making up ES 3 all scored in the "Significant Activity" range.

Essential Service 3 Current Activities Summary

To better understand ES 3 performance in DuPage County, an online group discussion was held on January 27, 2022. Twenty-two stakeholders participated in the discussion including representation from public health, healthcare, non-profits, behavioral health, policy/advocacy, research, education, food bank, housing, public safety, human services, county government, public library and religious/faith-based organizations. Participants reviewed the ES 3 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 3.1, Health Education and Promotion (Score: 67.5, Significant Activity). This standard explores the extent to which the local public health system provides policy makers, stakeholders, and the public with health information and recommendations for policies; and coordinates and engages the community in health promotion and education activities. Participants shared that there is a range of activities in this area. The DCHD website was cited numerous times as a constant, trusted source of important data and information related to public health. Several other networks and community organizations were specifically cited as resources for health education and promotion. They are listed in the table below.

Standard 3.2, Health Communication (Score: 61.3, Significant Activity). This standard explores the extent to which the local public health system uses health communication strategies to contribute to healthy living including developing health communication plans for media and public relations, using relationships with media, and conducting spokespersons training on public health issues. The DCHD website is a trusted source for public health information in the county. The Impact DuPage website (www.impactdupage.org) also acts as a community resource for data and information. Participants noted that health communication content and strategies have changed during the COVID-19 pandemic as well.

Standard 3.3, Risk Communication (Score: 58.3, Significant Activity). This standard explores the local public health system performance in using health risk communications strategies including developing an emergency communications plan; ensuring systems are in place for rapid response; and providing crisis response training. Participants shared that health care agencies are able to connect quickly and work together well in response to emergencies and that this collaboration and networking only strengthened during the COVID-19 pandemic. Existing emergency response teams and plans were strengthened due to the pandemic response and there is an opportunity to continue leveraging these meetings and communication channels into the future.

ES 3: Inform, Educate and Empower People About Health Issues Current Activities Summary Table	
• Hinsdale Hospital Mobile RX pantry that they host twice a month in collaboration with one of the churches in the area as well as Northern Illinois Food Bank; in addition to providing boxed produce and food, they also use that as an opportunity at every pantry pick up to distribute health information. • Simplifying sharing of information on community resources in as many languages as possible through email blasts to email lists/volunteer database/social media and then pointing people to the health department website for where to go for information. • Empowering the public to utilize public health resources as trusted sources of information. • Educating providers directly. • Pointing people to the DCHD website as a trusted source of information. • Email distribution lists. • Referrals to the health department services. • Shift in communications due to COVID-19; simplify complex ideas and blast them everywhere. • Not reinventing the wheel, but linking to existing resources (i.e. DCHD website).	• School Nurse Network: Zoom meeting with the health department related to COVID-19; beyond COVID-19, Prevention Leadership Team (PLT). • Continuum of Care group (preventing and ending homelessness); robust website and communication through that resource. • People's Resource Center (PRC): network of hunger, emergency food resources; convenes the DuPage Hunger Network meeting quarterly and leverages resources and connectivity. • Behavioral Health Collaborative (BHC): predates COVID-19; improved resources and collaboration within the county; better services and education to the community. • DCHD Health Promotions Team: wonderful leadership and educators; direct service team for mental health included; active on social media and direct communication.

Essential Service 3 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 3 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.
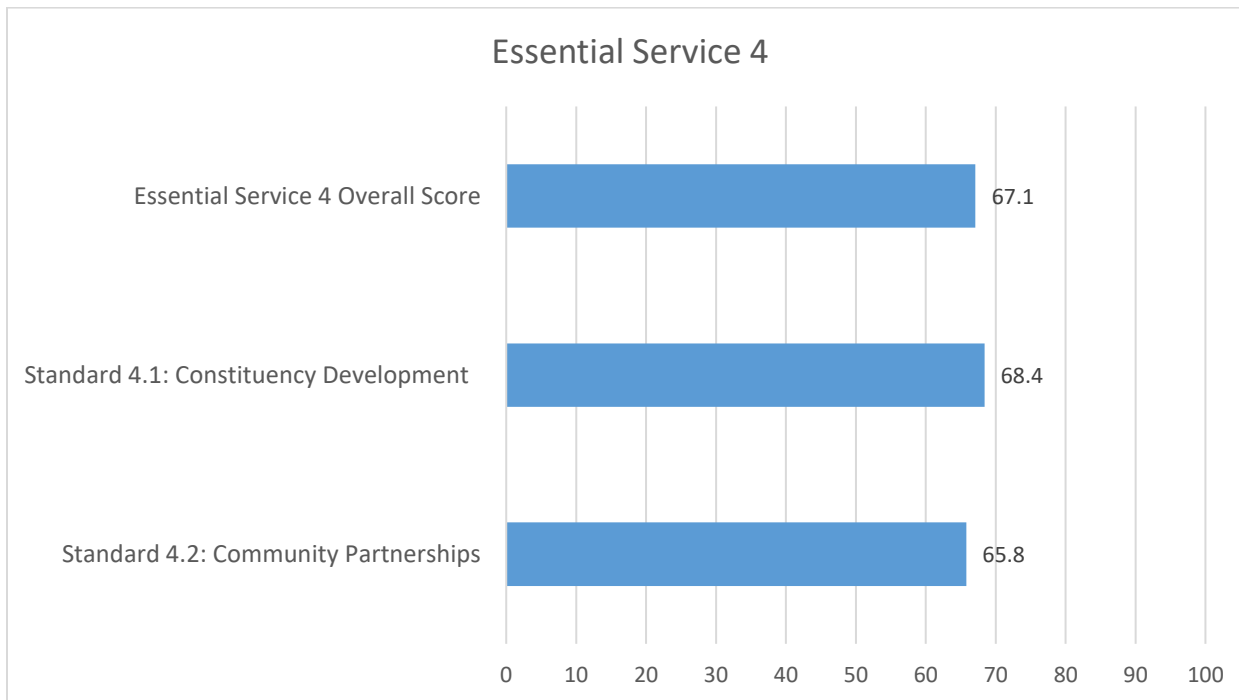
Strengths
• Impact DuPage data dashboard.
• Health Equity and Access Response Team (HEART).
• Linking and connecting patients to resources and specialty care.
• Local schools are strong partners in the local public health system.
• Using the health department as the source of trusted information that health system partners can redirect the community to.
• Partnerships; shared responsibility with shared goals.
• PLT (communication alignment, information sharing, user friendly).
• Servant leadership style; asking hard questions to foster sustainable partnerships.

Weaknesses
• Disbelief of experts; how do we do better to address and talk about these topics?
• Seniors and mental health needs (i.e. food assistance, dental needs etc.).
• Unprecedented leadership change; creates opportunities for improvement with new leaders.
• Public communication clarity; needs to be easily translatable; bridge the gap of understanding; this is particularly true with special populations.
• Public health was not as well known before COVID-19; now having the ability to capitalize on the public's realization about what public health is and what we do.

Near-Term Improvement Opportunities
• Establish a stronger network for informing the older adult population.
• Make sure the public health systems gathers and has information to share with the public (specific to senior population).
• Restore trust with the community.
• Continue to identify the right languages and format to communicate with residents.

Long-Term Improvement Opportunities
• Coordinated care and coordination of services with partners; making sure to collaborate to provide shared services.
• Not every community has a group like "We Go Together for Kids", so we should continue the work they have done during COVID-19 throughout DuPage County (in reference to coordinated care mentioned above).

Essential Services 4: Mobilize Community Partnerships to Identify and Solve Health Problems

ES 4 is composed of the following standards:

- 4.1: Constituency Development
- 4.2: Community Partnerships

Survey Results

Essential Service 4

Essential Service 4 Overall Score	67.1
Standard 4.1: Constituency Development	68.4
Standard 4.2: Community Partnerships	65.8

0 10 20 30 40 50 60 70 80 90 100

The overall score for ES 4 based on responses by thirty-nine survey responses was 67.1 and ranked fifth highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for the standards making up ES 4 all scored in the "Significant Activity" range.

Essential Service 4 Current Activities Summary

To better understand ES 4 performance in DuPage County, an online group discussion was held on January 27, 2022. Twenty-two stakeholders participated in the discussion including representation from public health, healthcare, non-profits, behavioral health, policy/advocacy, research, education, food bank, housing, public safety, human services, county government, public library, and religious/faith-based organizations. Participants reviewed the ES 4 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: *The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.*

Standard 4.1, Constituency Development (Score: 68.4, Significant Activity). This standard explores the local public health system performance in identifying and involving a wide range of community partners and providing opportunities to contribute to community health. Participants described many existing county-wide collaboratives such as the BHC or the DuPage Federation as well as resources such as Impact DuPage and DuPage Community Resource Information System (CRIS) social service repository that come together to provide on-going work and resources in the county.

Standard 4.2, Community Partnerships (Score: 65.8 Significant Activity). This standard explores the extent to which the local public health system establishes community partnerships and strategic alliances to provide a comprehensive approach to community health improvement; establishes a broad-based community health improvement committee; and assesses the impact of these efforts. Participants described a wide range of community partnerships that included organizations with specific population focus within DuPage County such as the DuPage Senior Citizens Council who has a focus on senior health and the PLT that supports the administration of the Illinois Youth Survey in local schools to monitor youth substance abuse and mental health.

ES 4: Mobilize Community Partnerships to Identify and Solve Health Problems Current Activities Summary Table	
• BHC, PLT, and others; quite a lot of activities in this space. • County-wide collaboratives are strong; local level- collaboratives with longevity. • Healthcare partners coordinate community partnership opportunities to improve health (i.e. VNA Community Advisory). • With help from the PLT, schools can administer the Illinois Youth Survey. This provides county data about substance use and mental health. • Impact DuPage. • Zero Suicide Committee: Providing resources via QR code and link to embed on websites. • DuPage Federation's Council of Community Leaders– focused cross- sector conversations.	• Directories – Integrated Referral and Intake System (IRIS) through the health department; connecting home visitation services. • Behavioral health emergency services and crisis calls. • Senior Services – DuPage Senior Citizens Council distributes food (i.e. Meals on Wheels) and provides mental health services. • People's Resource Center. • 211, a call line to access social services, is coming soon. • DCHD partnerships with hospital systems; sharing COVID-19 information and vaccine information. • AMITA Health Glen Oaks built and utilized a micro pantry. • DuPage CRIS: Social service repository.

Essential Service 4 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 4 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths

- Existing partnerships.
- Collaborating and partnering with senior living, housing communities.
- DuPage Health Coalition (DHC) as a major strength in the community; they fill a critically important gap in both service delivery, partnership, and advocacy activities.
- Healthcare partners coordinate community partnership opportunities to improve health (i.e. VNA Community Advisory).

Weaknesses

- Work that is done in silos; more collaboration needs to be done; specifically for mental health services and keeping up to date with resources.
- Awareness of various agencies' strategic plans and who is doing work in specific areas; what impact is being made.
- New local organizations and collaboratives need support (structurally and operationally, etc.)
- Historically under-resourced and underserved populations needing attention; weakness is that it took COVID-19 to address those special populations.
- Lack of formal representation from historically marginalized groups within data and surveys.
- Resource rich, but coordination poor.
- Update and market the resources that exist; not recreating something new.

Near-Term Improvement Opportunities

- Working more with small and large businesses for health access and health education.
- Resource database managed by county for community services (i.e. DuPage CRIS).
- Explore new methods and methodologies to address survey burnout.
- Carefully address deficiencies by being intentional in the design and frameworks that support this work today and beyond.
- Early childhood connections and expansion.

Long-Term Improvement Opportunities

- Establishing a place where public health system stakeholders can submit resources; a resource database.
- Purple Binder, Aunt Bertha, DuPage CRIS are all data repository tools; opportunity is to work collectively to strengthen one tool.
- Capacity building with local level groups and new groups, foster engagement with the health department; foster alignment.
- Involving and inviting populations with lived experience in the development work that supports their communities.

Essential Services 5: Develop Policies and Plans that Support Individual and Community Health Efforts

ES 5 is composed of the following standards:

- 5.1: Governmental Presence at the Local Level
- 5.2: Public Health Policy Development
- 5.3: Community Health Improvement Process and Strategic Planning

Survey Results
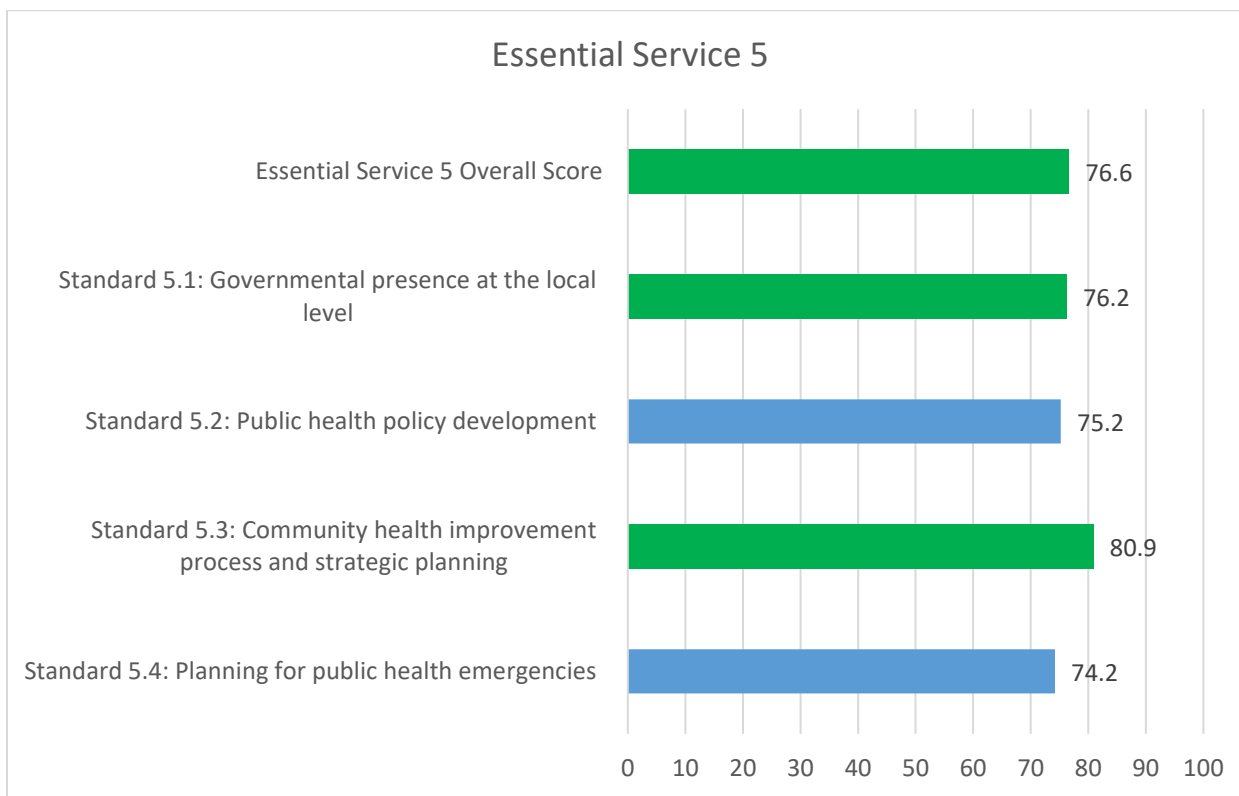
The overall score for ES 5 based on responses by eleven survey responses was 76.6 and ranked highest among scores for the 10 EPHS. This puts this ES in the "Optimal Activity" range indicating that DuPage County's public health system "Is doing absolutely everything possible for this activity and there is no room for improvement." Half of the individual standard scores for ES 5 scored in the "Significant Activity" range, while the other half scored in the "Optimal Activity" range.

Essential Service 5 Current Activities Summary

To better understand ES 5 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on February 1, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, non-profits, policy/advocacy, education, public safety, and municipal government. Fourteen participants reviewed the ES 5 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 5.1, Governmental Presence at the Local Level (Score: 76.6, Optimal Activity). This standard explores the extent to which the local public health system regularly supports the work of the local health department to ensure the 10 EPHS are provided; sees that the local health department is accredited; and ensures the local health department receives appropriate resources. The DCHD has been accredited through the Public Health Accreditation Board (PHAB) since 2014. Participants described the DCHD as a source of truth and that health systems and community partners can steer people and organizations to the DCHD for reliable data and up-to-date information.

Standard 5.2, Public Health Policy Development (Score: 75.2, Significant Activity). This standard explores the local public health system performance in contributing to public health policies; alerts policymakers and the community of the possible public health impacts of policies; and reviews existing policies at least every three to five years. Participants specifically mentioned the opportunity to work collaboratively on health policies as a near-term and long-term improvement opportunity.

Standard 5.3, Community Health Improvement Process and Strategic Planning (Score: 80.9, Optimal Activity). This standard explores the extent to which the local public health system establishes a Community Health Improvement Plan (CHIP) with broad-based participation; develops strategies to achieve identified CHIP objectives; and connects its organization strategic plans with the CHIP. In order to meet their on-going PHAB accreditation requirements the DCHD along with their clinical and community partners engage in their CHA and CHIP process every five years. The CHA process informs the development of plans and strategies that are built into the county CHIP.

Standard 5.4, Planning for Public Health Emergencies (Score: 74.2, Significant Activity). This standard explores the performance of the local public health system in supporting a workgroup to develop and maintain preparedness and response plans; developing a plan for its use; and testing and revising the plan, at least every two years. Participants shared that the COVID-19 pandemic provided an opportunity to integrate more public health response planning within the community and thus ensured that entities worked more collaboratively with community members and coalitions across the county. Participants also spoke of the opportunity to leverage existing groups such as the DuPage Mayors and Managers Conference for on-going collaboration and communication to support planning and response to public health emergencies.

ES 5: Develop Policies and Plans that Support Individual and Community Health Efforts Current Activities Summary Table	
• DCHD has been PHAB accredited since 2014; plans are required for accreditation. Workforce plan, quality improvement plan, in-house service unit policies, in-house standing orders. • PLT works closely with legislative manager at DCHD; advocacy work for new prevention policies for community to adopt. • The DCHD staff involved in coalitions working on access to public benefits (i.e. Medicaid, SNAP etc.); mechanism within the region with DCHD and community partners working to inform community about the services they are eligible for. • Dissemination and deciphering of COVID-19 information from the health department (timely and effective).	• Working throughout COVID-19 with policy makers and community leaders about policies and plans; DuPage Mayors and Managers Conference – across all thirty-five municipalities to coordinate on health. • Continuous work engaging diverse voice in community health survey; asking additional questions about demographics and offering options that are more responsive to community needs. • DCHD has always had programs in place to develop and test plans (i.e. Environment of Care Committee); revamped public health response program.

Essential Service 5 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 5 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• Level of collaboration throughout the community to ensure there is no duplication of efforts.
• DCHD in-house senior leadership support.
• DCHD is a source of truth; Health systems can steer people and organizations to the health department.
• The Impact DuPage collaboration helps to coordinate CHA.
• Impact DuPage community dashboard is a source of centralized data for others to use.
Equitable distribution of COVID-19 vaccines.

Weaknesses
• Misinformation and distrust in government was highlighted during COVID-19.
• Current fatigue by the health department.

Near-Term Improvement Opportunities
• Pandemic provided an opportunity to integrate more public health response planning within the community, working more collaboratively with community members and coalitions.
• Opportunity to work together on health policies (i.e. vaccine requirements).
• Leveraging dollars coming into the state for different efforts and continuing to collaborate.
• Intentional in referring people to the health department as they are a source of truth.
• Hospitals/organizations try to build up and support the work of the health department; agencies need to continue this through consistent messaging/scripting and continued support and direction for folks to that source of truth.

Long-Term Improvement Opportunities
• Opportunity to build on culturally competent messaging to address the misinformation and distrust in government that was highlighted during COVID-19.
• Always a focus on what programs the community needs and how quickly the public health system can get them started and scaled up; Partners need to ensure we're working towards policy, systems, and environmental changes.
• For DCHD's CHIP, getting to the root causes of poor health outcomes and risk factors is harder long-term; we need to craft policy at a systems-level that is intentional in addressing these.

Essential Services 6: Enforce Laws and Regulations that Protect Health and Ensure Safety

ES 6 is composed of the following standards:

- 6.1: Reviewing and Evaluating Laws, Regulations, and Ordinances
- 6.2: Involvement in Improving Laws, Regulations, and Ordinances
- 6.3: Enforcing Laws, Regulations, and Ordinances

Survey Results
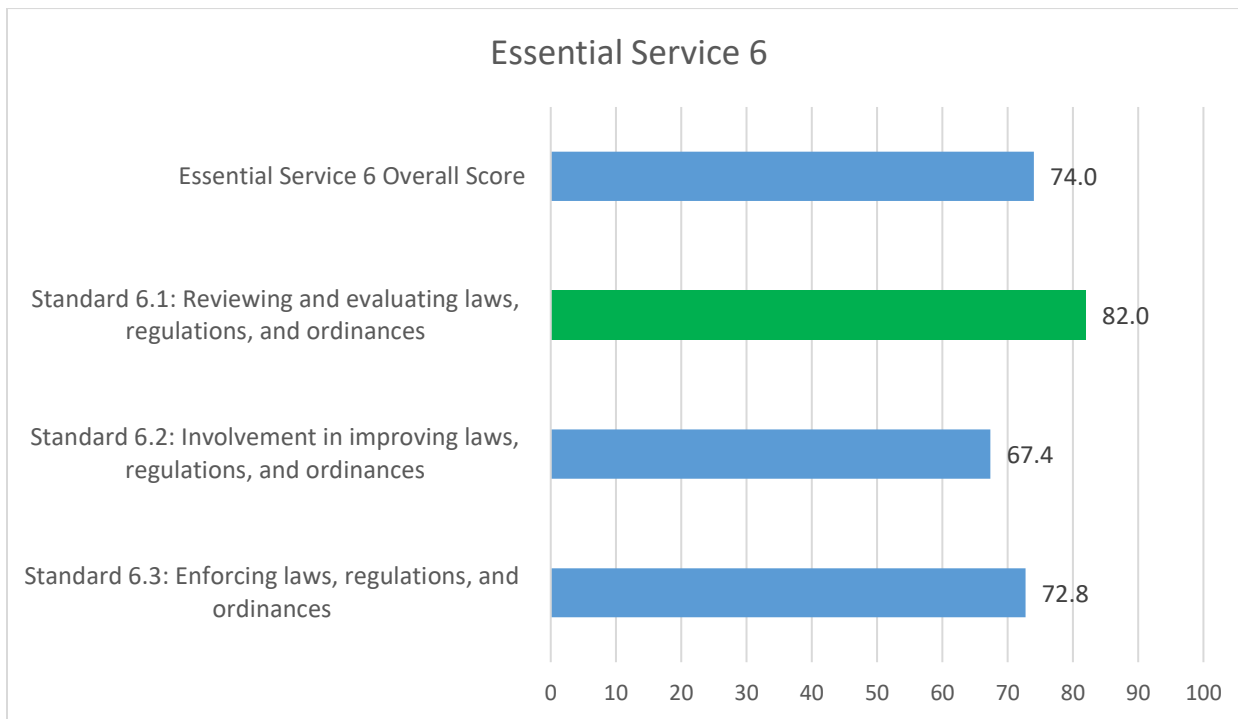
The overall score for ES 6 based on responses by eleven survey responses was 74.0 and ranked second highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for Standards 6.2 and 6.3 scored in the "Significant Activity" range. Standard 6.1 scored in the "Optimal Activity" range.

Essential Service 6 Current Activities Summary

To better understand ES 6 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on February 1, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, non-profits, policy/advocacy, education, public safety, and municipal government. Fourteen participants reviewed the ES 6 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 6.1, Reviewing and Evaluating Laws, Regulations, and Ordinances (Score: 82.0, Optimal Activity). This standard explores the local public health system performance in identifying public health issues that should be addressed through laws and regulations; reviewing laws and regulations with public health impact; having access to legal counsel for technical assistance; and involving governing entities in reviewing and developing public health laws and regulations. Participants noted that the DCHD provides up to date information on state regulations that are in turn rolled out throughout the county. They also spoke of on-going collaboration during the COVID-19 pandemic to inform policy makers about the latest recommendations and guidelines.

Standard 6.2, Involvement in Improving Laws, Regulations, and Ordinances (Score: 67.4, Significant Activity). This standard explores the performance of the local public health system in identifying local public health issues inadequately addressed in existing laws and regulations; participating in changing existing laws and regulations to protect and promote public health; providing technical assistance in drafting language for proposed changes or new laws and regulations; and evaluating the effects of policies and regulations. Participants spoke about how helpful legislative reports are that explain policies being proposed at the state and federal level and see them as an opportunity to stay aware of legislation that is being considered. Participants also spoke about the opportunity for training and support of coalition members and others community organizations in relation to policy and advocacy to empower them to become more engaged in this work.

Standard 6.3, Enforcing Laws, Regulations, and Ordinances (Score: 72.8, Significant Activity). This standard explores the performance of the local public health system in identifying organizations with authority to enforce public health laws; ensuring that a local health department has authority to act in public health emergencies; ensuring that enforcement activities are conducted; informing and educating about relevant laws; and evaluating compliance with public health laws. Participants identified the opportunity to monitor the implementation of new and existing legislation to ensure they are being implemented appropriately. They also discussed opportunities for responsible legislation in public health so that policies are not just punitive but consider how the public health systems can educate through these laws to help people change their habits.

ES 6: Enforce Laws and Regulations that Protect Health and Ensure Safety Current Activities Summary Table	
• DCHD provides up-to-date information on state regulations that are in turn rolled out to schools throughout the county. • Legislative reports from DCHD showing policies being proposed at the state and federal level is an opportunity to stay aware. • DCHD collaboration with the Consumer Product Safety Commission to protect swimmers and raise awareness on the Virginia Graeme Baker Act.	• Prevention groups advocating to make state follow through on policy changes (i.e. Tobacco 21 Law). • Collaboration to inform policy makers early in the pandemic (i.e. health department, business community, mayors etc.). • Collaboration through issue discussion, both externally and internally, then back out (i.e. lobbyists, executive directors etc.). • Not just being punitive but thinking about how the public health system can educate through these laws to help people change their habits.

Essential Service 6 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 6 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• PLT working around policy systems change. • State attorney's office has been active in activities done through PLT in drafting language (i.e. social host policy). • Collaboration across multiple sectors for policy and advocacy. • Changing policies at both the state and local level, as well as organizational policies are a strength and an opportunity for improvement (i.e. chronic disease work with the health systems about changing food environment).

Weaknesses
• Early on COVID-19, public health entities were perceived as authorities that enforce rules, when their intention was to work collaboratively with communities to enact policies that kept everyone safe and healthy.

Near-Term Improvement Opportunities
• Opportunity for groups to work together to inform policies; monitoring legislative items and working to shape them; regulatory action to be taken; educational campaigns. • Opportunity to create a group focused on policy and advocacy; the DuPage Federation's Council of Community Leaders could play a role in formalizing this. • Opportunity for training and supporting our coalition members and others at the table to empower them to become engaged. • Opportunity to leverage collaborative partners to work on communication and education of the role of the health department; need to build trust with communities. • Fortify two-way communication between educational system and health department around policies and guidelines. • Help with understanding legislative schedules (when is the best time of the year to host town halls targeting elected officials); becoming more familiar with the legislative process.

| Long-Term Improvement Opportunities |
|---|
| • Community members don't always have interest and knowledge about policy. Community coalition groups would benefit from advocacy training; development of a one-pager with biggest takeaways.
• Identify full spectrum of policy changes from the state level to the federal level.
• Continuing the follow-up after policy implementation to assess how are they doing on implementation; does data indicate change. |

Essential Services 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care When Otherwise Unavailable

ES 7 is composed of the following standards:

- 7.1: Identifying Personal Health Service Needs of Populations
- 7.2: Ensuring People are Linked to Personal Health Services

Survey Results

Essential Service 7

	Score
Essential Service 7 Overall Score	59.9
Standard 7.1: Identifying personal health service needs of populations	60.2
Standard 7.2: Ensuring people are linked to personal health services	59.5
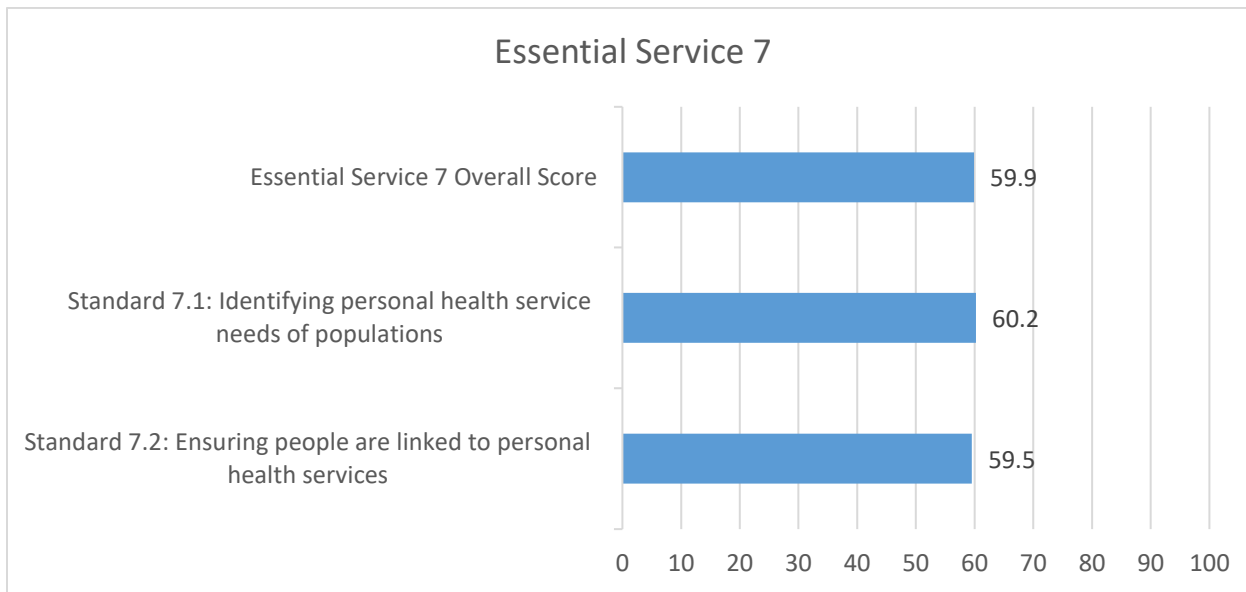
The overall score for ES 7 based on responses by thirty-nine survey responses was 59.9 and ranked eighth highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for the standards making up ES 7 all scored in the "Significant Activity" range.

Essential Service 7 Current Activities Summary

To better understand ES 7 performance in DuPage County, an online group discussion was held on January 27, 2022. Twenty-two stakeholders participated in the discussion including representation from public health, healthcare, non-profits, behavioral health, policy/advocacy, research, education, food bank, housing, public safety, human services, county government, public library, and religious/faith-based organizations. Participants reviewed the ES 7 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 7.1, Identifying Personal Health Service Needs of Populations (Score: 60.2, Significant Activity). This standard explores the performance of the local public health system in identifying groups who have trouble accessing personal health services and unmet needs; defining roles and responsibilities for partners in responding to unmet needs; and understanding reasons for people not getting health services they need. Participants spoke about the work groups such as the HEART Workgroup, DHC, and Access DuPage were taking on to ensure equitable access to care and services in the county. Other initiatives such as the Home Visiting Network and Early Childhood Collaboration were mentioned for their focused work in DuPage.

Standard 7.2, Ensuring People are Linked to Personal Health Services (Score: 59.5, Significant Activity). This standard explores the performance of the local public health system in connecting people to organizations providing personal health services, considering unique needs of different populations; helping people sign up for public benefits; and coordinating the delivery of personal health and social services to ensure care. In addition to the groups and services mentioned under 7.1, participants highlighted additional activities being led by Interfaith Community Partners and Hesed House (Homeless Shelter in Aurora) to work to address specific needs within the county. Additionally, efforts by the county and the DCHD were highlighted for their efforts to create sustainable linkages among the organizations and groups working across the county.

ES 7: Mobilize Community Partnerships to Identify and Solve Health Problems Current Activities Summary Table	
- DHC and Access DuPage ensures access to care. - County and DCHD efforts that create and sustain linkages and connections. - Home visiting Network (serves families with children ages 0-3): spearheaded by the health department; connects families to health resources.	- Early childhood collaborations; Dial-a-ride program. - Interfaith community partners. - Access to get to appointments, transportation. - Hesed House. - HEART workgroup.

Essential Service 7 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 7 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• Five social determinants of health screening (i.e. social isolation, food insecurity, affordable medication, transportation etc.); facility will coordinate and support as a health system. • Mobile dentistry. • High levels of health insurance coverage, ninety-three percent of adults and ninety-seven percent of children; coverage doesn't always equal health care though. • HEART workgroup. • On-going assessments with families (dynamics are strong with ever changing environments); Father engagement programs uncovers barriers for other special populations.
Weaknesses
• Serving the needs of the homeless population. • Senior services rides do not go to hotels.
Near-Term Improvement Opportunities
• Providing education at the community level and leveraging existing resources; taking advantage of flu shot clinics for example. • Screen patients in clinics for food insecurity; referring patients to mobile pantry for food services. • Opportunity for programming and outreach at laundromats. • Data sharing and organizational alignment; Electronic health records being able to talk to one another.
Long-Term Improvement Opportunities
• Consistency in messaging what resources are where for community members. • Opportunity to connect people with providers that meet their needs (i.e. people who can serve LGBTQ+ populations, adolescents etc.).

Essential Services 8: Assure a Competent Public Health and Personal Health Care Workforce

ES 8 is composed of the following standards:

- 8.1: Workforce Assessment, Planning and Development
- 8.2: Public Health Workforce Standards
- 8.3: Life-Long Learning through Continuing Education, Training, and Mentoring
- 8.4: Public Health Leadership Development

Survey Results

Essential Service 8

	Score
Essential Service 8 Overall Score	56.1
Standard 8.1: Workforce assessment, planning, and development	56.7
Standard 8.2: Public health workforce standards	63.3
Standard 8.3: Life-long learning through continuing educations, training, and mentoring	54.0
Standard 8.4: Public health leadership development	50.2
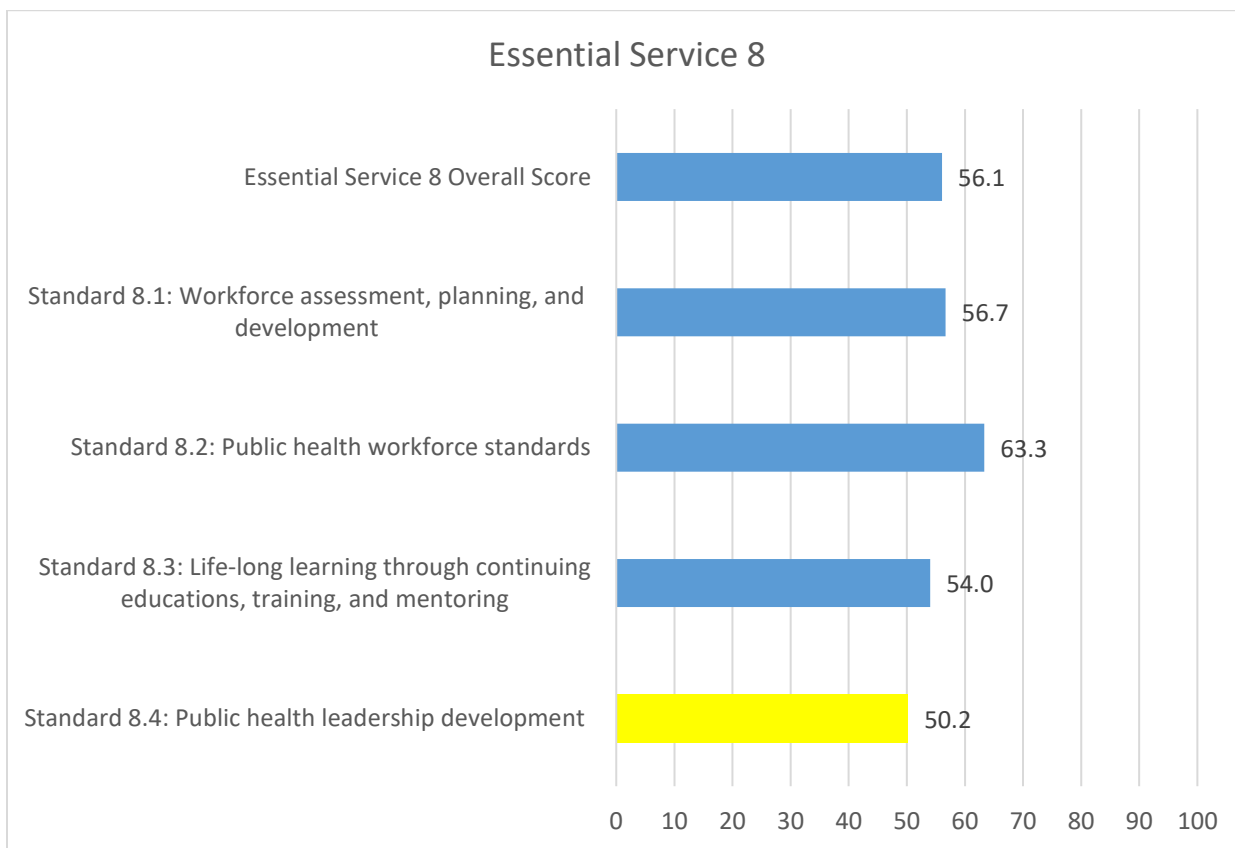
The overall score for ES 8 based on responses by six survey responses was 56.1 and ranked ninth highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for Standards 8.1, 8.2, and 8.3 scored in the "Significant Activity" range. Standard 8.4 scored in the "Moderate Activity" range.

Essential Service 8 Current Activities Summary

To better understand ES 8 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on February 3, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, policy/advocacy, higher education, religions/faith-based organizations, and behavioral health. Eight participants reviewed the ES 8 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 8.1, Workforce Assessment, Planning and Development (Score: 56.7, Significant Activity). This standard explores the extent to which the local public health system assesses, reviews, and shares information about the local public health system workforce assessment. Participants shared that the DCHD conducts a workforce assessment and creates a plan that looks at its existing workforce including strengths and needs using the public health core competencies. The workforce development plan is aligned with requirements by the PHAB. An annual staffing survey is implemented within the DCHD. A training survey is implemented on an annual basis as well to inform on-going training plans.

Standard 8.2, Public Health Workforce Standards (Score: 63.3, Significant Activity). This standard explores the performance of the local public health system in ensuring that the workforce have required certificates, licenses, and education; developing and maintaining job standards; and basing hiring and performance reviews in public health competencies. The DCHD offers Continuing Education Units (CEUs) and CPR training to staff and community members and maintains requirements for credentialing and licensing. Public health accreditation requires a workforce development plan. This plan is updated annually and includes information on essential services and assesses comfort level with competencies.

Standard 8.3, Life-Long Learning through Continuing Education, Training, and Mentoring (Score: 54.0, Significant Activity). This standard explores the performance of the local public health system in encouraging lifelong learning by identifying education and training needs; providing ways for developing core public health skills; developing incentives for training; and creating and supporting collaborations between organizations to support training and education. As mentioned above, the DCHD offers CEUs and CPR training to staff and community members and maintains requirements for credentialing and licensing. There are also plans to develop and grow a more robust internship program for university level students, specifically in behavioral health and nursing.

Standard 8.4, Public Health Leadership Development (Score: 50.2, Moderate Activity). This standard explores the performance of the local public health system in providing broad access to leadership development; creating a shared vision of community health; ensuring that organizations and individuals have opportunities to provide leadership; and providing opportunities for leadership development that reflect the diversity of the community. A CHA and CHIP process is in place to assess what is going on in the community in relation to the public health system. At DCHD, the first Diversity, Equity, and Inclusion (DEI) training has been scheduled with leadership staff. A second training will be held for additional DCHD staff in 2022. Participants from DCHD also mentioned that the pandemic exposed staff to different leadership opportunities and agency leadership sees this as an opportunity to foster professional growth and development among these emerging leaders.

ES 8: Assure a Competent Public Health and Personal Health Care Workforce Current Activities Summary Table

- Credentials for hiring people (i.e. licensure, background etc.).
- Work with jails and hospitals for other credentialing.
- The health department offers CEUs and CPR training to staff and community members.
- Training needs assessment is conducted in-house at the health department annually (helps inform future training activities).
- Annual staff survey is implemented, growing and becoming more comprehensive year over year.
- First DEI training has been scheduled with DCHD leadership staff and then for individuals beyond leadership.
- Opportunities for continuing education for school nurses.
- Public health accreditation requires workforce development plan: updated annually including information on ES, assesses comfort level with competencies.

- Rigor developed and maintained by DCHD (i.e. credentialing services, standards etc.) "Dual accountability and opportunity to develop continuing education."
- Pandemic exposed different staff to leadership opportunities (i.e. call center, overseeing vaccine, testing clinic etc.).
- Opportunity for professional growth.
- CHA and CHIP process assessing what is going on in the community in relation to the public health system.
- Formal workforce development plan is in place at DCHD; team meets regularly to ensure required training and desired trainings are included in quarterly training calendar.

Essential Service 8 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 8 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• Process set up for annual in-house training needs assessment.   • External work that is done with adolescents and teens through Reality/DuPage County Teen Advisory Board exposes high school students to policy (i.e. tobacco prevention).   • DCHD awarded best workplace in the Chicagoland area.

Weaknesses
• If DCHD doesn't capitalize on building leadership teams, the agency won't have capable leaders.   • Behavioral Health Services team is increasingly difficult to find clinical staff who are bi-lingual, especially those to work in crisis centers; pay demand for these services have increased.   • Many nursing roles at DCHD are not as clinical, more administrative related, so more challenging to fill. New graduates are not necessarily drawn to this type of work.   • Residential program through DCHD is more entry level and hard work; these positions are harder to fill.   • DCHD Environmental Health roles are hard to fill (i.e. health inspectors), usually on a three year cycle.

| Near-Term Improvement Opportunities |
|---|
| • DCHD maintaining competitive pay through the implementation of the salary and compensation study via an outside consultant; understanding if the agency is competitive with other similar organizations.
 • DCHD leadership development is both a weakness and an opportunity.
 • County-wide perspective across the health system; need for health system to develop workforce that looks like and understands the needs of the public (i.e. mental health).
 • Outside consultant addressing salary/positions and health department understanding if they are competitive with other organizations.
 • Current DCHD goal is to triple the Behavioral Health operation over the next few years to serve the needs of the community.
 • Opportunity to build a more robust internship program; as an organization DCHD has gone up and down with internships for university level students; there is commitment now to build up a more robust offerings across disciplines.
 • DCHD using specific employment branding across social media platforms to recruit staff. |

Long-Term Improvement Opportunities

- Opportunity to strengthen the partnership with GPS (a career exploration platform) to connect high school students with career paths if they are not college-bound (i.e. manufacturing, healthcare etc.).
- Looking at equity gaps (opportunity to develop a workforce that resembles our county and community).
- Extra attention to public health careers as a result of the pandemic; DCHD and other organizations have an opportunity to work with higher education to foster career development.

Essential Services 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Health Services

ES 9 is composed of the following standards:

- 9.1: Evaluating Population-Based Health Services
- 9.2: Evaluating Personal Health Services
- 9.3: Evaluating the Local Public Health System

Survey Results

Essential Service 9

- Essential Service 9 Overall Score: 61.0
- Standard 9.1: Evaluating population-based health services: 60.0
- Standard 9.2: Evaluating personal health services: 59.3
- Standard 9.3: Evaluating the local public health system: 63.8
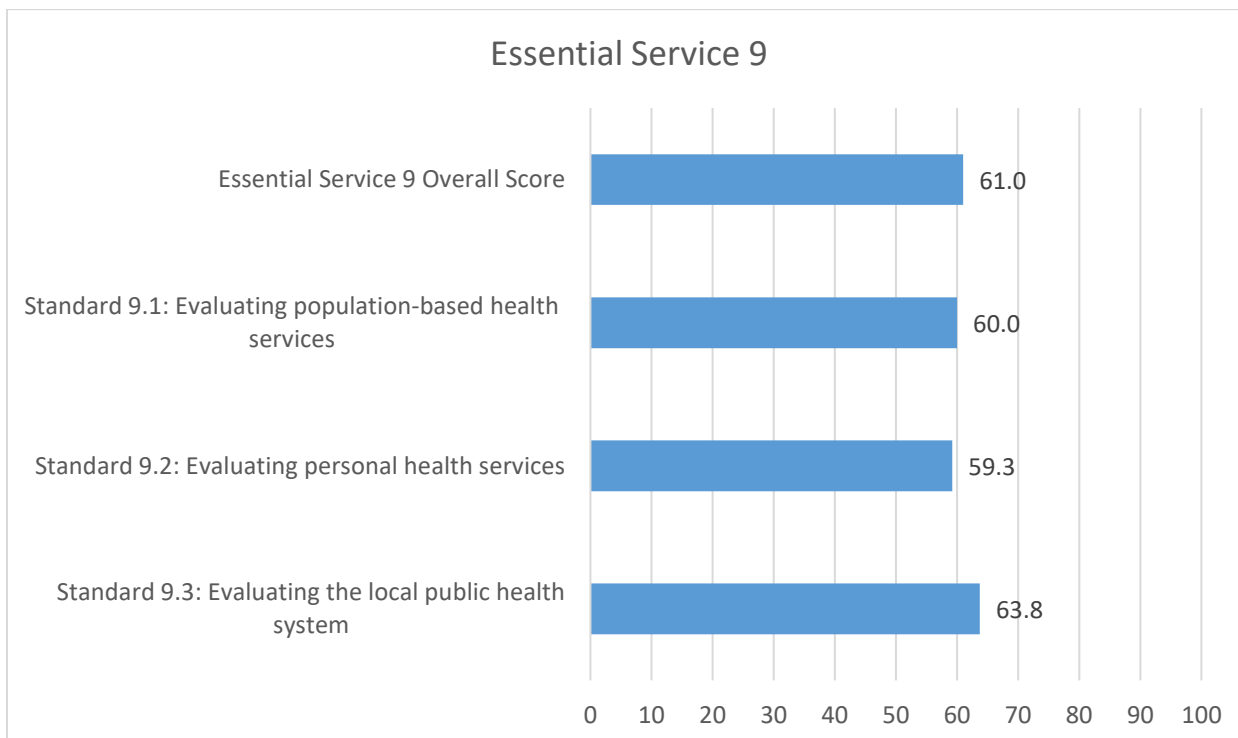
The overall score for ES 9 based on responses by six survey responses was 61.0 and ranked seventh highest among scores for the 10 EPHS. This puts this ES in the "Significant Activity" range indicating that DuPage County's public health system "Participates a great deal in this activity and there is opportunity for minor improvement." Individual scores for the standards making up ES 9 all scored in the "Significant Activity" range.

Essential Service 9 Current Activities Summary

To better understand ES 9 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on February 3, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, policy/advocacy, higher education, religions/faith-based organizations, and behavioral health. Eight participants reviewed the ES 9 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.

Standard 9.1, Evaluating Population-Based Health Services (Score: 60.0, Significant Activity). This standard explores the performance of the local public health system in evaluating the effectiveness of population-based health services, which are aimed at disease prevention and health promotion for the entire community. Participants shared several specific client satisfaction processes that had been implemented with great success across the county. Leveraging technology such as the Qualtrics platform for surveying and feedback operations was successful as well and shows promise for successful expansion and integration elsewhere.

Standard 9.2, Evaluating Personal Health Services (Score: 59.3, Significant Activity). This standard explores the extent to which the local public health system evaluates the accessibility, quality, and effectiveness of personal health services; uses technology to improve quality of care; and uses findings to improve services. As shared above, participants discussed several specific client satisfaction processes that had been implemented with great success across the county. Leveraging technology such as the Qualtrics Platform for surveying and feedback operations was successful as well and shows promise for successful expansion and integration elsewhere.

Standard 9.3, Evaluating the Local Public Health System (Score: 63.8, Significant Activity). This standard explores the performance of the public health system as a whole, including identifying organizations to contribute to the 10 EPHS; evaluating of the public health system; assessing how well organizations are coordinating services; and using results to improve the system. DuPage County evaluates the performance of the local public health system through the LPHSA. This assessment is conducted with partners across the public health system to describe how well the public health system works together to deliver the 10 EPHS.

ES 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services Current Activities Summary Table	
• Legislation passed for home health services (i.e. doula work). • DCHD does a good job at measuring client satisfaction in creative ways (i.e. Happy or Not Happy kiosks). • DCHD Sexually Transmitted Disease clinic helped assess and track client satisfaction and patient experience.	• Qualtrics platform used for running vaccine operations (surveying and feedback operations) to improve quality of care; future opportunity to leverage this tool for other projects at DCHD.

Essential Service 9 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 9 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• Impact DuPage dashboard is a great resource with many metrics and data points for stakeholders (i.e. tracking on-going opportunities, identification of gaps and barriers etc.).
• Strategic plan identifies/says we'll prioritize tech projects built on deeper integration across systems that all work at improving quality of care.

Weaknesses
• Billing and finance evaluation; sometimes a barrier for initiatives DCHD wants to start doing as there is not always a clear path to a return on investment.
• The pace of change can lead to "Decision Paralysis"; there are so many possible solutions and improvement areas in regard to technology, making it difficult to prioritize.
• School social workers struggle with connecting students to mental health care due to insurance barriers.

Near-Term Improvement Opportunities
• Training on legislation and legislative session.
• Grant deliverables include clinic auditing practices (i.e. random chart audits, record reviews etc.) at DCHD, expanding application of internal auditing practices.
• Opportunity to connect different groups on behavioral health initiatives.
• Policy development is constantly changing and is always an area for improvement.
• Opportunities to advocate for different policy changes (i.e. behavioral health access, having insurance companies recognize housing as a healthcare need).

Long-Term Improvement Opportunities
• DCHD behavioral health services do a large amount of auditing so there is an opportunity to assist other service units (i.e. trainings for staff, immunization clinics etc.).
• Making Impact DuPage a more robust collaborative opportunity for community members to be a part of the process.
• Opportunity to capitalize on the ease of/transition to subscription cloud-based technologies.

Essential Services 10: Research for New Insights and Innovative Solutions to Health Problems

ES 10 is composed of the following standards:

- 10.1: Fostering Innovation
- 10.2: Linking with Institutions of Higher Learning and/or Research
- 10.3: Capacity to Initiate or Participate in Research

Survey Results

Essential Service 10

Category	Score
Essential Service 10 Overall Score	40.0
Standard 10.1: Fostering innovation	50.1
Standard 10.2: Linking with institutions of higher learning and/or research	37.1
Standard 10.3: Capacity to initiate or participate in research	32.9
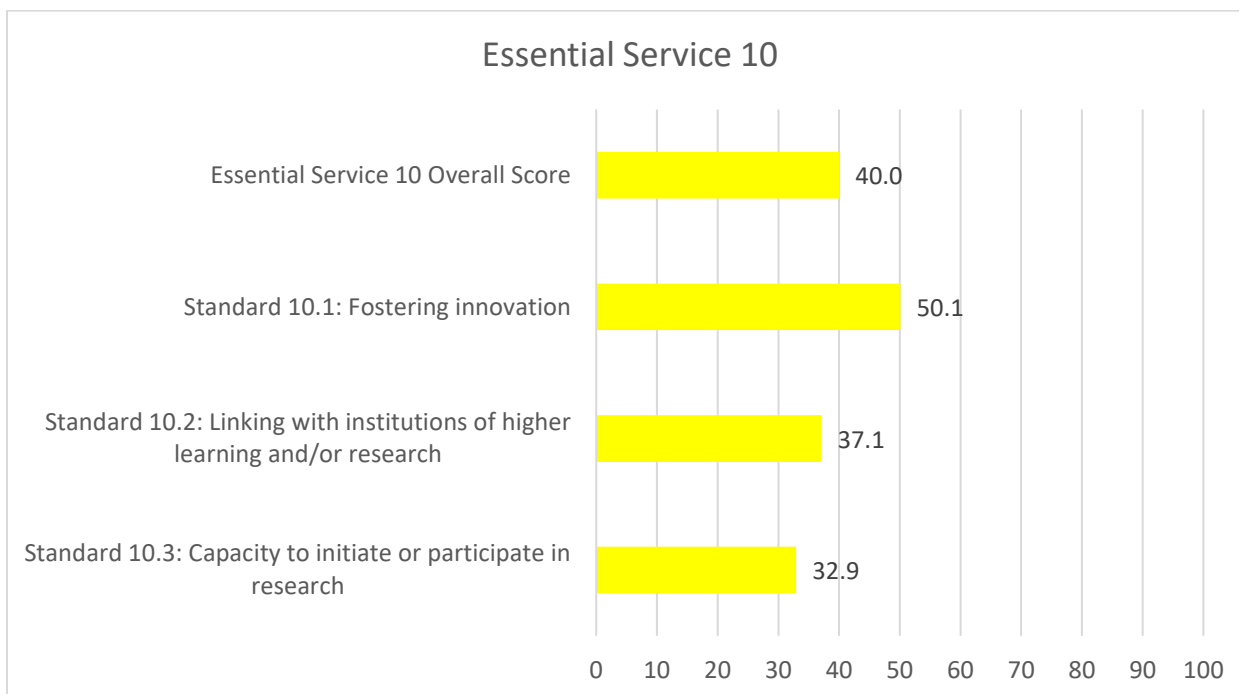
The overall score for ES 10 based on responses by six survey responses was 40.0 and ranked tenth among scores for the 10 EPHS. This puts this ES in the "Moderate Activity" range indicating that DuPage County's public health system "Somewhat participates in this activity and there is opportunity for greater improvement." Individual scores for the standards making up ES 10 all scored in the "Moderate Activity" range.

Essential Service 10 Current Activities Summary

To better understand ES 10 performance in DuPage County, a digital survey was distributed in January 2022 that was followed by an online group discussion was held on February 3, 2022. Stakeholders who participated in the survey and discussion included representation from public health, healthcare, policy/advocacy, higher education, religions/faith-based organizations, and behavioral health. Eight participants reviewed the ES 10 survey results and then engaged in discussions about current activities for the service. Based on these activities, participants then identified what they thought to be strengths, weaknesses, short-term improvement opportunities, and long-term improvement opportunities.

Note: *The information captured in this table is based on what participants are aware of and may not be comprehensive for DuPage County.*

Standard 10.1, Fostering Innovation (Score: 50.1, Moderate Activity). This standard explores the extent to which the public health system provides staff with time and resources to conduct studies to test new solutions, suggest ideas for new research, keep up current best practices in public health, and encourage community participatory research.

Standard 10.2, Linking with Institutions of Higher Learning and/or Research (Score: 37.1, Moderate Activity). This standard extent to which the local public health system establishes relationships and partnerships with colleges, universities, and other research organizations.

Standard 10.3, Capacity to Initiate or Participate in Research (Score: 32.9, Moderate Activity). This standard explores the extent to which the local public health system collaborates with researchers, supports research with necessary resources, shares findings with the community, and evaluates research efforts.

In general, participants shared that while there is great opportunity to increase efforts and collaboration for Standards 10.1, 10.2, and 10.3 within ES 10, more time and staff capacity are needed in order to do so.

Essential Service 10 Strengths, Weaknesses, and Opportunities

Considering the standards that make up ES 10 and what they know to be currently in place, the participants identified strengths, weaknesses, and opportunities for DuPage County, which are summarized below.

Strengths
• Facilitation of focus groups by HEART.
Weaknesses
• We don't have a great standard for articulating or evaluating results (i.e. communicating research findings effectively).   • In reference to ES 10, more partners and time is needed to foster innovation, establish relationships with institutions of higher education, initiate/participate in research, and evaluate public health systems research efforts; there are opportunities to do these things, but there is currently a gap.
Near-Term Improvement Opportunities
• Opportunity to partner with students in higher education.   • Some of DCHD's federal grants have involved evaluation funding that could be leveraged in this area.   • Opportunity with environmental health.   • Resurrect DCHD's Communicable Disease and Epidemiology's monthly journal club; had a successful Quality Improvement project emerge from one of the articles a few years ago, which has been one of the goals for applications of findings.   • Research in messaging and public health communications.
Long-Term Improvement Opportunities
• Research in messaging and public health communications.   • On the clinical side, insurance companies hold data and there are strides at the state level with data sharing (i.e. hospital data for discharges, transfers, and admissions etc.) opportunity to share.

Conclusion

Impact DuPage's LPHSA revealed a strong and well-functioning public health system with significant activity in completing the vast majority of the 10 EPHS. The survey results combined with the insights captured during the follow-up discussions reveal that the DuPage County public health system is built on a foundation of trust, a spirit of collaboration, and a commitment to share resources to address identified needs.

The assessment revealed key areas of excellence for DuPage County. The public health system includes strong laboratory service and reviewing and evaluation of laws, regulations, and ordinances. ES 6, however, resulted in the highest overall score from the assessment survey putting ES 6 and the majority of its subsequent standards in the "Optimal Activity" level. Impact DuPage was consistently mentioned as providing leadership for collaboration around CHA and planning. DCHD was identified as a pillar for public health activities in the county, showing its commitment to the 10 EPHS 10 with attainment of accreditation and reaccreditation through the PHAB.

Conversations throughout the assessment process underscored system partners concerns for local communities who may be more vulnerable to current and future health and public health threats. These include, but are not limited to, older adults, communities of color, those experiencing homelessness, and LGBTQ communities. The county's public health system currently includes many practices to support DEI. However, more work in outreach and inclusion of these many communities was identified as a need to strengthen the system. The work being taking on by HEART and implementation of DEI trainings were particular efforts of note by participants in this assessment to further address inequities in the county. Development and support of a more diverse workforce that is reflective of the communities being served as well as developing more linguistically and culturally appropriate materials and practices were also expressed as efforts that could broaden the public health system's impact for vulnerable populations, especially in linking to personal health care services.

The COVID-19 pandemic and response in DuPage County exposed many of the strengths and areas for improvement for the local public health system. COVID-19 further emphasized the disparities based on race, income, housing, and employment as well as needs for behavioral health services that existed prior to the pandemic. Emergency response systems were lauded by partners for efficient and effective communications across system partners. Community engagement efforts by Impact DuPage, the DCHD and other partners were also a highlight.

The LPHSA showed that the DuPage County public health system has built deep trust among current partners and a true spirit of collaboration. Some areas for broader collaboration that could benefit the system included workforce development, evaluation, and research and innovation. While individual agencies showed efforts in these areas, sharing findings and coordination of planning efforts across the system could help better inform future efforts and direct resources. The near and long-term opportunities identified and summarized in this report provide ideas for future strategic planning to improve the health system's ability to deliver the 10 EPHS and improve DuPage County's public health system.