

Assessing Policy-Engagement Competencies of Health Personnel in Aurora Province Basis for Capability Enhancement

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Abstract

Sustainable public health governance is essential for achieving universal health care in the Philippines. Local health workers, particularly in rural settings, must have strong policy engagement skills to support this goal. This study assessed the policy engagement competencies of health managers in Aurora Province's rural health units and examined the effects of experience, education, and relevant training. A descriptive comparative quantitative design was used, involving 107 respondents (68 managerial, 39 health staff) selected through non-probable convenience sampling. The study applied a policy engagement framework with six core competency domains: (1) Collect and assess information, (2) Translate and share information, (3) Cultivate partnerships, (4) Foster capacity, (5) Develop infrastructure, and (6) Influence decisions. Responses were analyzed separately to ensure accuracy. Findings showed that both managers and health staff demonstrated high competency in all domains. Years of experience and educational attainment had no significant impact, as all p-values exceeded 0.05, validating the null hypothesis. However, relevant training significantly improved engagement skills in five out of six domains, except "Collect and assess information." The study highlights the importance of targeted training programs to enhance policy engagement skills in weaker areas. A proposed capacity enhancement program aims to strengthen public health workers' competencies, ultimately advancing health equity and improving governance in rural health settings.

Keywords: Capacity Enhancement, Evidence-Based Policy Making, Policy Engagement Competencies, Public Health Workers, Rural Health Unit (4-6)

Introduction

Public health workers play a critical role in generating data that informs policy decisions and intervention programs. Health policy, as defined by Maddalena and Najafizada (2021), is a subset of public policy focused on population health. However, challenges in evidence-based policymaking persist, including a lack of interdisciplinary collaboration, inadequate evaluation criteria, and frequent personnel turnover (Yazdizadeh et al., 2021). Developing policy engagement competencies is essential for advancing public health goals (Pirani et al., 2022). Studies highlight the need for capacity-building through education and digital integration (Acheampong et al., 2021). Policy development and program planning are recognized as key competencies for public health professionals, particularly health

managers, who rely on governance tools like the Local Health Scorecard and the Seal of Good Local Governance (Centers for Disease Control and Prevention, 2021). Rural health managers often adopt policies from other municipalities, highlighting a gap in independent policy engagement. Assessing and enhancing policy engagement competencies among health managers is crucial to improving public health service delivery.

2. Materials and Methods

2.1 Research Locale

The study was conducted in Aurora Province, located in East-Central Luzon, bordered by Isabela, Quirino, Nueva Ecija, Nueva Vizcaya, Bulacan, Quezon, and the Pacific Ocean.

2.2 Sampling Procedure

A convenience sampling method was used, selecting public health workers managing rural health programs, including nurses, medical technologists, midwives, and sanitation inspectors. To strengthen validity, additional health staff from various municipalities were included. A total of 107 respondents (68 managerial staff and 39 health staff) participated, with informed consent obtained before data collection via survey questionnaires.

2.3 Research Instrument

The researcher used a validated questionnaire, adapted from the Public Health Foundation, to assess policy engagement competencies among Aurora Province's health managers. It underwent expert validation, pilot testing, and statistical analysis, covering demographics and six competency domains, with academic approval secured before data collection.

2.4 Data Gathering and Procedures

After approval, the researcher secured permission from health officers in Aurora Province, then distributed the Google form questionnaire via multimedia platforms with a consent form. The collected data was tabulated and analyzed with a statistician's assistance.

3. Result and Discussion

Table 3.1 Percentage and Frequency Distribution of Respondents according to their Age in years

Age in years	Managerial Respondents		Health Staff Respondents	
	Frequency	Percentage (%)	Frequency	Percentage
20 - 26	4	5.88	8	20.51
27 - 33	20	29.41	10	25.64
34 - 40	21	30.88	6	15.38
41 - 47	4	5.88	3	7.69
48 - 54	11	16.18	9	23.08
55 - 61	6	8.82	2	5.13
62 - above	2	2.94	1	2.56
Subtotal	68	100.00	39	100.00
Proportion of the respondents	68	63.55%	39	36.45%
Total	Frequency: 107		Percentage: 100%	

Distribution of Respondents		
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Table 3.1 presents the respondents of the study, revealing that among 107 participants, 63.55% (n=68) were managerial staff, while 36.45% (n=39) were health staff. The largest age group among managers was 34 to 40 years (30.88%), whereas for health staff, it was 27 to 33 years (25.64%). Age distributions varied across both groups, with smaller proportions in older age categories.

Table 3. 2 Percentage and Frequency Distribution of Respondents according to their Sex

Civil Status	Managerial Respondents		Health Staff		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Single	26	38.24%	18	46.15%	44	41.12%
Married	39	57.35%	17	43.59%	56	52.34%
Living-in	1	1.47%	2	5.13%	3	2.80%
Widow/er	1	1.47%	2	5.13%	3	2.80%
Separated	1	1.47%	0	0.00%	1	0.94%
Total	68	100%	39	100%	107	100%

Table 3.2 shows that the majority of respondents were female, with managerial staff at 67.65% and health staff at 85%. Overall, across both groups, females accounted for 73.83% of respondents, while males comprised 26.17%.

Table 3.3 Percentage and Frequency Distribution of Respondents according to their Civil Status

Sex	Managerial Respondents		Health Staff		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Female	46	67.65%	33	84.62%	79	73.83%
Male	22	32.35%	6	15.38%	28	26.17%
Total	68	100%	39	100%	107	100%

Table 3.3 reveals that the majority of respondents were married, with managerial staff at 57.35% and health staff at 46.15%. Overall, across both groups, married individuals comprised 52.34%, while singles made up 41.12%. Living-in and widowed respondents each accounted for 2.80%, and separated individuals represented the smallest proportion at 0.94%.

Table 3.4 Percentage and Frequency Distribution of Respondents according to their Educational Attainment

Educational Attainment	Managerial Respondents		Educational Attainment	Health Staff		Total	
	Frequency	Percentage		Frequency	Percentage	Frequency	Percentage
Bachelor's Degree	46	67.65%	Bachelor's Degree	18	46.15%	64	59.81%
College Undergraduate	1	1.47%	College Undergraduate	2	5.13%	3	2.80%
Diploma in Midwifery	2	2.94%	Diploma in Midwifery	16	41.03%	18	16.82%
Master's Degree	8	11.76%	Master's Degree	1	2.56%	9	8.41%
Doctoral Degree	11	16.18%				11	10.28%
			Associate Degree	1	2.56%	1	0.94%
			Vocational	1	2.56%	1	0.94%
Subtotal	68	100.00	Subtotal	39	100%	107	100%

Table 3.4 shows that the majority of respondents held a Bachelor's Degree (59.81%), followed by a Diploma in Midwifery (16.82%), a Doctoral Degree (10.28%), and a Master's Degree (8.41%). Smaller proportions included College Undergraduate (2.80%), Associate Degree, and Vocational qualifications (0.94% each).

Table 3.5 Percentage Distribution of Managerial Respondents according to their years of experience in Public Health Management

Years of Experience in Public Health Management	Frequency	Percentage
less than 1 year	2	2.94
1 - 8 years	26	38.24
9 - 15 years	26	38.24
16 - 22 years	5	7.35
23 - 29 years	3	4.41
30 - 36 years	6	8.82
Total	68	100.00

Table 3.5 reveals that the largest groups of managerial respondents had 1 to 8 years and 9 to 15 years of experience (both at 38%). Smaller proportions included those with 30 to 36 years (9%), 16 to 22 years (7%), 23 to 29 years (5%), and less than 1 year (3%) of experience.

Table 3.6 Percentage Distribution of Health Staff Respondents by their years of experience

Years of Experience in Public Health Management	Frequency	Percentage
1 - 6	22	56.41
7 - 12	7	17.95
13 - 18	2	5.13
18 - 23	1	2.56
24 - 29	5	12.82
30 - 35	2	5.13
Total	39	100.00

Table 3.6 views that the majority of health staff respondents had 1 to 6 years of experience (56%), followed by 7 to 12 years (18%), 24 to 29 years (13%), 13 to 18 years and 30 to 35 years (both 5%), and 18 to 23 years (2.56%).

Table 3.7 Percentage and Frequency Distribution of Respondents according to their Position/Title

Position	Managerial Respondents		Health Staff		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Dentist	2	2.94%			2	1.87%
Municipal Health Officer	9	13.24%			9	8.41%
Sanitation Inspector	4	5.88%			4	3.74%
Health Education Program Officer	3	4.41%			3	2.80%
Health Program Officer	1	1.47%			1	0.94%
Nurse	34	50.00%			34	31.78%
Medical Technologist	9	13.24%			9	8.41%
Midwife III	5	7.35%			5	4.67%
Nutritionist Dietician	1	1.47%			1	0.94%
Administrative Staff			8	20.51	8	7.47%
IT in Health			2	5.13	2	1.87%
Midwife			29	74.36	29	27.10%

Total	68	100%	39	100%	107	100%
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Table 3.7 reveals that among managerial respondents, nurses were the largest group (50%), followed by medical technologists and municipal health officers (13.24% each). Among health staff, midwives dominated (74%), with administrative staff at 21%. Overall, nurses comprised 31.78% of total respondents, midwives 27.10%, and other roles, including medical technologists, municipal health officers, and sanitation inspectors, had smaller representations.

Table 3.8 Percentage Distribution of Respondents with and without training in Public Health Management or Policy Engagement

With training attended related to Public Health Management or Policy Development/Engement	Managerial Respondents		Health Staff		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
With training	44	64.71	24	61.54	68	63.55%
Without training	24	35.29	15	38.46	39	36.45%
Total	68	100%	39	100%	107	100%

Table 3.8 shows that the majority of respondents had received training in public health management or policy engagement, with 64.71% of managerial staff and 62% of health staff reporting relevant training. Overall, 63.55% of total respondents had undergone training, while 36.45% had not.

Policy Engagement Competencies

Following the demographic analysis, the study examined respondents' policy engagement competencies, which are crucial for effective public health governance. Six core competency domains were assessed: (1) Collect and assess information, (2) Translate and share information, (3) Cultivate partnerships, (4) Foster capacity, (5) Develop infrastructure, and (6) Influence decisions. A validated Likert Scale was used to measure confidence in performing tasks related to these domains, with responses from managerial and health staff analyzed separately using mean and standard deviation.

Table 3.9 Policy Engagement Competency of Health Unit Managers and Staff in the "Collect and Assess Information" Domain

A. Collect and Assess Information	Managerial			Health Staff		
I am able to...	Mean	Standard	Verbal	Mean	Standard	Verbal

		Deviation	Description		Deviation	Description
1. describe factors that affect the health of a community	3.54	0.50	Strongly Agree	3.51	0.56	Strongly Agree
2. access existing qualitative and quantitative data to inform policy decisions	3.53	0.50	Strongly Agree	3.41	0.55	Strongly Agree
3. collect, analyze, manage, and utilize quantitative and qualitative data to influence policy decisions	3.54	0.53	Strongly Agree	3.38	0.59	Strongly Agree
4. utilize statistical tools and software for public health data analysis.	3.37	0.52	Strongly Agree	3.38	0.54	Strongly Agree
Overall Weighted Mean	3.50	0.41	Strongly Agree	3.42	0.51	Strongly Agree

Table 3.9 reveals that both health managers and staff demonstrated strong competency in the "Collect and Assess Information" domain, with managers scoring a slightly higher overall mean (3.50) compared to staff (3.42), both categorized as "Strongly Agree." The highest-rated skill was "Describe factors that affect the health of a community," while the lowest was "Utilize statistical tools and software for public health data analysis," indicating a potential gap for improvement. The findings align with studies emphasizing evidence-based decision-making in public health, such as Lopes et al. (2020) and Tulane University (2022). Targeted training in statistical tools could enhance data-driven policy formulation, supported by frameworks like the World Health Organization's Data Management Competency Framework (2023).

Table 3.10 Policy Engagement Competency of Health Unit Managers and Staff in the "Translate and share information" Domain

B. Translate and share information	Managerial			Health Staff		
I am able to...	Mean	Standard Deviation	Verbal Description	Mean	Standard Deviation	Verbal Description
5. determine communication strategies or communication platforms to support the policy process	3.44	0.50	Strongly Agree	3.49	0.51	Strongly Agree
6. communicate with	3.44	0.53	Strongly	3.41	0.55	Strongly

internal and stakeholders regarding the public health policy process			Agree			Agree
7. respond to information, misinformation, and disinformation through multimedia platforms such as social media, town hall meetings, commentaries, letters	3.38	0.57	Strongly Agree	3.51	0.51	Strongly Agree
8. facilitate policy process communication among individuals, groups, and organizations	3.38	0.55	Strongly Agree	3.46	0.51	Strongly Agree
Overall Weighted Mean	3.41	0.44	Strongly Agree	3.47	0.45	Strongly Agree

Table 3.10 reveals that both managers and health staff demonstrated strong competency in translating and sharing information, with staff scoring a slightly higher mean (3.47) compared to managers (3.41), both categorized as "Strongly Agree." Staff excelled in responding to misinformation through multimedia platforms, while managers were proficient in determining communication strategies. However, managers showed a slight gap in digital literacy, which may impact their ability to counter misinformation effectively. Given the increasing reliance on digital platforms, targeted training in media literacy and stakeholder engagement could enhance their communication effectiveness. Studies by Winterbauer et al. (2015) and Regis College (2022) emphasize the importance of strong communication skills in public health, highlighting the need for continuous training in policy advocacy and digital engagement.

Table 3.11 Policy Engagement Competency of Health Unit Managers and Staff in the "Cultivate Partnership" Domain

C. Cultivate Partnership	Managerial			Health Staff		
I am able to...	Mean	Standard Deviation	Verbal Description	Mean	Standard Deviation	Verbal Description
9. describe conditions, systems, and policies affecting community health and resilience as but not limited to social and institutional inequities, determinants of health,	3.41	0.58	Strongly Agree	3.38	0.54	Strongly Agree

racism, historical trauma, gender discrimination etc						
10. establish and maintain relationships with other healthcare institutions and agencies to improve community health and resilience	3.56	0.53	Strongly Agree	3.41	0.55	Strongly Agree
11. collaborate and share power with community members, stakeholders, and organizations with public health policy process	3.53	0.53	Strongly Agree	3.49	0.51	Strongly Agree
12. seek feedback from community members, stakeholders, and organizations to improve public health policy	3.54	0.53	Strongly Agree	3.59	0.50	Strongly Agree
Overall Weighted Mean	3.51	0.47	Strongly Agree	3.47	0.48	Strongly Agree

Table 3.11 revealed that the study found that both managers and staff demonstrated strong competency in cultivating partnerships, with managers scoring slightly higher (3.51) than staff (3.47), both categorized as "Strongly Agree." Managers excelled in establishing relationships with healthcare institutions, while staff showed strength in seeking feedback from stakeholders. However, both groups had the lowest scores in describing conditions and policies affecting community health resilience, indicating a need for targeted training on social determinants of health. Addressing these gaps through specialized workshops can enhance their ability to advance health equity, as emphasized by the CDC (2023) and the Public Health Agency of Canada (2023).

Table 3.12 Policy Engagement Competency of Health Unit Managers and Staff in the "Foster Capacity" Domain

D. Foster Capacity	Managerial			Health Staff		
I am able to...	Mean	Standard Deviation	Verbal Description	Mean	Standard Deviation	Verbal Description
13. recognizes one's own professional development needs	3.46	0.53	Strongly Agree	3.38	0.49	Strongly Agree
14. collaborate with other public health workers and	3.60	0.52	Strongly Agree	3.51	0.51	Strongly Agree

stakeholders on policy-related roles and competencies development needs						
15. participate in continuous professional development opportunities to enhance team performance	3.62	0.52	Strongly Agree	3.59	0.50	Strongly Agree
16. advocate for allocating resources to strengthen organizational capacity for policy	3.57	0.53	Strongly Agree	3.54	0.51	Strongly Agree
Overall Weighted Mean	3.56	0.46	Strongly Agree	3.51	0.45	Strongly Agree

Table 3.12 revealed that both managers and staff demonstrated strong competency in fostering capacity, with managers scoring slightly higher (3.56) than staff (3.51), both categorized as "Strongly Agree." The highest-rated item for both groups was participation in continuous professional development, reinforcing the importance of ongoing training. However, the lowest-rated item—recognizing one's own professional development needs—suggests a potential gap in self-awareness. Findings align with research by Karsikas et al. (2025) and Mlambo et al. (2020), emphasizing the role of knowledge management and continuous learning in professional growth. Addressing self-awareness through structured self-assessment tools, as suggested by Hauwiller (2024), could further enhance leadership effectiveness among health managers.

Table 3.13 Policy Engagement Competency of Health Unit Managers and Staff in the "Develop Infrastructure" Domain

E. Develop Infrastructure	Managerial			Health Staff		
I am able to...	Mean	Standard Deviation	Verbal Description	Mean	Standard Deviation	Verbal Description
17. explain the importance and mentor staff on how to engage with politicians, policymakers, and the public to support public health infrastructure	3.31	0.60	Strongly Agree	3.41	0.50	Strongly Agree
18. identify and address emerging needs of public health to recommend policy improvement	3.38	0.57	Strongly Agree	3.49	0.51	Strongly Agree

19. identify gaps in the organizational structure that hinder the achievement of satisfactory public health infrastructure	3.43	0.58	Strongly Agree	3.41	0.50	Strongly Agree
20. determines financial resources needed for organizational infrastructure, programs, and services to support long-term policy initiatives	3.26	0.54	Strongly Agree	3.38	0.54	Strongly Agree
Overall Weighted Mean	3.35	0.50	Strongly Agree	3.42	0.47	Strongly Agree

Table 3.13 revealed that both managers and staff demonstrated strong competency in developing infrastructure, with staff scoring slightly higher (3.42) than managers (3.35), both categorized as "Strongly Agree." Managers excelled in identifying gaps in organizational structures, while staff showed strength in addressing emerging public health needs for policy improvements. However, the lowest-rated competency for both groups was determining financial resources for long-term policy initiatives, indicating a need for training in financial management. Research by Lopes et al. (2020) and Risley (2020) highlights similar gaps in financial planning among health managers, emphasizing the importance of capacity-building efforts in budgeting and resource allocation to strengthen public health infrastructure.

Table 3.14 Policy Engagement Competency of Health Unit Managers and Staff in the "Influence Decisions" Domain

F. Influence Decisions	Managerial			Health Staff		
I am able to...	Mean	Standard Deviation	Verbal Description	Mean	Standard Deviation	Verbal Description
21. access, provide, and interpret evidence for interventions that are supportive rather than corrective to support decision-making	3.34	0.59	Strongly Agree	3.33	0.48	Strongly Agree
22. considers factors such as fiscal, social, political, environmental, legal, and geographic in influencing public health policy	3.32	0.58	Strongly Agree	3.36	0.54	Strongly Agree

decisions						
23. participate in decision-making processes that shape public health policies	3.47	0.59	Strongly Agree	3.41	0.50	Strongly Agree
24. evaluate the outcomes of policy decisions to improve future strategies affecting public health outcomes	3.41	0.60	Strongly Agree	3.44	0.50	Strongly Agree
Overall Weighted Mean	3.39	0.52	Strongly Agree	3.38	0.46	Strongly Agree

Table 3.14 revealed that both managers and staff demonstrated strong competency in influencing decisions, with managers scoring slightly higher (3.39) than staff (3.38), both categorized as "Strongly Agree." Managers excelled in participating in decision-making processes, while staff showed strength in evaluating policy outcomes. However, managers had lower competency in considering various external factors (e.g., fiscal, social, political) in policy decisions, highlighting a need for further training. Studies by Lobczowska et al. (2022) emphasize the importance of sociocultural and economic factors in shaping public health policies. Additionally, staff had lower scores in accessing and interpreting evidence for supportive interventions, suggesting a potential area for capacity-building efforts to foster proactive policy development and resilience.

Table 3.15 Comparison of Policy Engagement Competencies Between Health Managers and Staff

	Managerial	Staff	t	p	Decision
Policy-Engagement Competencies	Mean	Mean	value	value	
1 Collect and assess information	3.50	3.42	0.769	0.445	Accept H ₀
2 Translate and share information	3.41	3.47	-0.622	0.535	Accept H ₀
3 Cultivate partnerships	3.51	3.47	0.453	0.652	Accept H ₀
4 Foster capacity	3.56	3.51	0.617	0.539	Accept H ₀
5 Develop infrastructure	3.35	3.42	-0.804	0.424	Accept H ₀
6 Influence decisions	3.39	3.38	0.015	0.988	Accept H ₀
*Significant at 0.05 level					

Table 3.15 revealed that there is no significant difference in policy engagement competencies between health managers and staff across multiple domains, confirming comparable proficiency levels. Both groups demonstrated strong capabilities in data analysis, communication strategies, partnership cultivation, professional development, infrastructure planning, and decision-making. However, targeted training is needed to address gaps, particularly in responding to misinformation, describing conditions affecting health resilience, recognizing personal development needs, and integrating financial and policy considerations into decision-making. Research by Nkwanyana et al. (2023), Mata et al. (2021), Bashkin et al. (2022), DeSalvo et al. (2017), and others underscore the importance of capacity-building efforts to enhance public health policy engagement.

Table 3.16 Analysis of Policy Engagement Competencies of Health Managers by Educational Attainment: ANOVA Results

	Policy-Engagement Competencies	F value	p-value	Decision
Educational Attainment	Collect and assess information	1.918	0.118	Accept
	Translate and share information	1.037	0.395	Accept
	Cultivate partnerships	0.774	0.547	Accept
	Foster capacity	2.081	0.094	Accept
	Develop infrastructure	1.63	0.178	Accept
	Influence decisions	1.386	0.249	Accept
*Significant at 0.05 level				

Table 3.16 revealed that there is no significant difference in policy engagement competencies among health managers when grouped by educational attainment, as all p-values exceeded 0.05, leading to the acceptance of the null hypothesis. This suggests that professional experience, leadership skills, and institutional support may have a greater impact on competency development. Research by Kant et al. (2015) and Liang et al. (2018) supports this, emphasizing the role of evidence-based practice, organizational support, and continuous training in strengthening policy engagement. Further studies should explore leadership training, institutional backing, and data utilization in enhancing policy-related competencies.

Table 3.17 Analysis of Policy Engagement Competencies of Health Managers by Years of Experience in Public Health Management: ANOVA Results

	Policy-Engagement Competencies	F value	p-value	Decision
Years of Experience in Public Health management	Collect and assess information	1.450	0.142	Accept
	Translate and share information	0.946	0.547	Accept
	Cultivate partnerships	1.119	0.365	Accept
	Foster capacity	1.158	0.330	Accept
	Develop infrastructure	0.650	0.870	Accept
	Influence decisions	0.656	0.865	Accept
*Significant at 0.05 level				

Table 3.17 revealed that there is no significant difference in policy engagement competencies among health managers when grouped by years of experience in public health management, as all p-values exceeded 0.05, leading to the acceptance of the null hypothesis. This suggests that tenure alone does not heavily influence policy engagement competency. Instead, factors like leadership skills, political acumen, stakeholder engagement, and institutional support play a more substantial role, as supported by research from Waring et al. (2021) and Perez-Gonzalez and Linhart (2024). Further studies could examine the impact of these factors on policy engagement effectiveness.

Table 3.18 Analysis of Policy Engagement Competencies of Health Managers by Training: ANOVA Results

	Policy-Engagement Competencies	F value	p-value	Decision
Training	Collect and assess information	3.347	0.072	Accept
	Translate and share information	5.229	0.025	Reject
	Cultivate partnerships	7.370	0.008	Reject
	Foster capacity	10.306	0.002	Reject
	Develop infrastructure	4.392	0.040	Reject
	Influence decisions	8.875	0.004	Reject
*Significant at 0.05 level				

Table 3.18 revealed that training participation significantly enhances policy engagement competencies among health managers, leading to notable differences across multiple domains, including translating information, cultivating partnerships, fostering capacity, developing infrastructure, and influencing decisions. With p-values below 0.05, the null hypothesis was rejected, confirming the impact of formal training programs.

Findings align with studies by DeSalvo et al., emphasizing the need for public health professionals to continuously strengthen their knowledge base, build strategic partnerships, and integrate new data insights. Similarly, Tama et al. (2024) demonstrated that targeted training programs significantly improve preparedness and confidence in policy engagement. These results underscore the importance of structured training initiatives to develop more effective and knowledgeable health managers.

Proposed Capacity Building Program

To bridge the training gaps in each domain, a capacity-building program is recommended, guided by Bloom's Taxonomy of Learning. Bloom's Taxonomy has been widely cited as an effective framework for public health interventions, as confirmed by Bergeron et al. (2017). Additionally, Asampong et al. (2023) support its application in translating knowledge into practice through structured implementation research training and mentorship. This approach ensures a comprehensive enhancement of policy engagement competencies among health managers and staff.

Table 3.19 Capacity Enhancement Plan for Public Health Policy Engagement

Policy Competencies	Engagement	Targeted Enhancement	Capacity Training	Action Plan and Outcomes	Expected
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Collect and assess information.	Data Management Competency Training	<p>Goal: Strengthen the ability to generate, process, utilize and analyze public health data for effective policy development, influencing</p> <p>The participants will be able to...</p> <p>Remember: determine key domains in data generation, processing, usage, and analysis.</p> <p>Understand: explain how the four competency areas or pillars contribute to evidence-based policymaking.</p> <p>Apply: utilize competency areas/pillars to analyze public health trends.</p> <p>Analyze: interpret and compare various data sources to verify reliability.</p> <p>Evaluate: assess the impact of precise data-driven policies.</p> <p>Create: develop graphical representations or reports for policy recommendations.</p>
Translate and share information.	Digital Literacy Training	<p>Goal: Improve digital literacy and communication skills</p> <p>The participants will be able to...</p> <p>Remember: identify digital platforms used for effective public health communication.</p>

		<p>Understand: describe the significance of countering misinformation, especially fake news on social media platforms.</p> <p>Apply: Exercise writing data-driven campaigns or summaries</p> <p>Analyze: Examine the effectiveness of multi-platform communication strategies</p> <p>Evaluate: assess the impact of digital literacy on policy engagement.</p> <p>Create: design an advocacy or awareness campaign for better public health communication.</p>
Cultivate partnerships	Training on the Social Determinants and Stakeholders Engagement for Advancing Health Equity	<p>Goal: Boost collaboration with stakeholders and achieve health equity.</p> <p>The participants will be able to...</p> <p>Remember: identify key partners and external factors that can effectively contribute to health policy engagement.</p> <p>Understand: explain the critical role of partnerships and social determinants of health in the policy development process.</p> <p>Apply: participate in council/board/stakeholder meetings and use data on the effects of social determinants of health to influence policy decisions.</p>

		<p>Analyze: assess challenges in cross-sector collaboration implementation and hindrances contributed by social determinants of health.</p> <p>Evaluate: measure the effectiveness of employing the contribution of social determinants of health to public health and the effectiveness of partnership-building initiatives.</p> <p>Create: a plan for strengthening the health sector partnership</p>
Foster capacity	Training Needs Assessment Program	<p>Goal: Identify skill gaps and set priorities for training programs, focusing on individuals' training needs</p> <p>The participants will be able to...</p> <p>Remember: identify skill gaps for training needs.</p> <p>Understand: Discuss the significance of regular participation in continuous professional development.</p> <p>Apply: Use a self-assessment tool to identify training gaps.</p> <p>Analyze: Compare self-performance after different capacity-building participations.</p> <p>Evaluate: Assess the impact of the utilization of structured self-assessment tool through</p>

		<p>Training Needs Assessment Program implementation on capacity improvement.</p> <p>Create: Propose a customized continuing professional education development plan for sustainability.</p>
Develop infrastructure	Strategic financial resource management and sustainability planning for public health programs.	<p>Goal: Strengthen knowledge of public health financing and sustainability.</p> <p>The participants will be able to...</p> <p>Remember: identify sources of public health funding.</p> <p>Understand: explain budgeting principles of various health program financial sources.</p> <p>Apply: Simulate budget allocation for public health priorities.</p> <p>Analyze: Compare financial sources' principles for strategic budgeting to achieve sustainable health programs.</p> <p>Evaluate: Critique the efficiency of various financial resource allocations.</p> <p>Create: Develop an investment plan and funding proposal for a public health initiative.</p>
Influence decisions	Short Course on Introduction to Health Policy and Systems Research	<p>Goal: Improve foundational knowledge and analytical skills in understanding and researching health systems and policies to support strategic</p>

		<p>decision-making in public health policies.</p> <p>The participants will be able to...</p> <p>Remember: Identify and define key concepts in health policy, system research, and governance.</p> <p>Understand: explain how fiscal, social, political, environmental, legal, and geographic factors influence health policy and system performance.</p> <p>Apply: Use case studies or current public health issues to practice policy decision-making.</p> <p>Analyze: assess the implications of policy decisions on public health outcomes.</p> <p>Evaluate: review the efficiency of past health policies.</p> <p>Create: Formulate a draft policy recommendation based on research or study findings.</p>
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Table 3.19 shows the proposed capacity enhancement plan for policy engagement in public health which follows Bloom's Taxonomy to ensure skill progression. The plan identifies targeted training topics available through Philippine government agencies like the Department of Health, Technical Education and Skills Development Authority, and the University of the Philippines. By integrating Bloom's six cognitive levels—Remember, Understand, Apply, Analyze, Evaluate, and Create—the program aims to develop comprehensive competencies in public health policy engagement.

4. Conclusions

1. The inclusion of health staff as respondents further validates the accuracy of managerial responses.

2. The study through statistical analysis revealed that health managers' policy engagement competency does not significantly vary based on educational attainment or years of experience. 3. Despite the consistently high competency levels observed across all domains, training participation was identified as a crucial factor influencing competency development.

4. These findings underscore the need for targeted capacity-building programs to strengthen health managers' ability to engage in policy-related processes. To address existing gaps, the following capacity-building topics are recommended, aligned with the lowest-rated mean score items in each domain of policy engagement:

Policy-Engagement Competencies	Recommended Capacity-Building Topics
Collect and assess information	Data Management Competency Training
Translate and share information	Digital Literacy Training
Cultivate partnerships	Training on the Social Determinants and Stakeholders Engagement for Advancing Health Equity
Foster capacity	Training Needs Assessment Program
Develop infrastructure	Strategic financial resource management and sustainability planning for public health programs.
Influence decisions	Short Course on Introduction to Health Policy and Systems Research

Enhancing the competencies of health managers through targeted training, continuous education, and professional development initiatives is essential for strengthening public health service delivery in rural communities. Research underscores the importance of structured learning in improving managerial effectiveness, as highlighted by Willie (2023), who emphasizes the role of professional development in healthcare management, covering areas such as healthcare record management, financial stewardship, and governance practices. By equipping health professionals with advanced skills and knowledge, these programs enhance the efficiency of health interventions and accelerate the achievement of health equity, ensuring that every individual can attain their highest level of health.

Main Author Biography

Princess Alen A. Cabunoc, a registered medical technologist from Casiguran, Aurora, is a dedicated public health advocate. She holds a degree in Medical Laboratory Science and has pursued further studies in Medical Technology and Public Administration. With expertise in HIV/AIDS coordination, blood donation programs, and health facility accreditation, she has contributed to municipal health services. She has received awards for research and leadership and served as a college lecturer. Currently, she plays a vital role in local health governance, engaging in policy development and community initiatives, including hosting a radio program to promote public health awareness.

References

1. Acheampong, A. K., Ohene, L. A., Asante, I. N. A., Kyei, J., Dzansi, G., Adjei, C. A., Adjorlolo, S., Boateng, F., Woolley, P., Nyante, F., & Aziato, L., "Nurses' and Midwives' Perspectives on

- Participation in National Policy Development, Review, and Reforms in Ghana: A Qualitative Study,” *BMC Nursing*, February 2021, 20, 26.
2. Ales, R. K., Reyes-Ramos, G. K., de Veyra, C., & et al., “Advancing Health Through Evidence-Assisted Decisions with the Health Policy and Systems Research Program: A Qualitative Evaluation of a National Health Research Grant Management Process in the Philippines,” *Health Research Policy and Systems*, June 2023, 21, 73.
3. Asampong, E., Kamau, E. M., Tabong, T.-N. N., & et al., “Capacity Building Through Comprehensive Implementation Research Training and Mentorship: An Approach for Translating Knowledge into Practice,” *Global Health*, March 2023, 19(35),
4. Aytona, M. G., Politico, M. R., McManus, L., Leonardia, M. I. C., Villa, F. T., Ramirez, R. M. A., & Lorenzo, F. M. E., “Determining Staffing Standards for Primary Care Services Using Workload Indicators of Staffing Needs in the Philippines,” *Human Resources for Health*, December 2022, 19(Suppl 1), 129.
5. Bergeron, K., Abdi, S., DeCorby, K., Mensah, G., Rempel, B., & Manson, H., “Theories, Models, and Frameworks Used in Capacity-Building Interventions Relevant to Public Health: A Systematic Review,” *BMC Public Health*, November 2017, 17(1), 914.
6. Branscomb, J., Powis, L., Cilenti, D., Dills, J. E., & Chaudhry, A., “Policy Engagement Framework for Public Health: A Tool to Enhance Maternal and Child Health Workforce Capacity,” *Maternal and Child Health Journal*, January 2023, 27(1), 1–6.
7. Bryant, B., & Ward, M., “A Strategic Approach to Workforce Development for Local Public Health,” *Canadian Journal of Public Health*, August 2017, 108(4), e403–e408.
8. Cariaso, J. E., Bonito, S. R., Dones, L. B. P., Melendres, J. C. N., & Sebastian, C. J. B., “Perceived Competencies and Training Needs of Public Health Nurses in the Philippines: Basis for the Development of NurseLEAD: A Leadership Course on Advanced Practice Nursing in Public Health,” *Acta Medica Philippina*, February 2024, 58(12), 78–85.
9. Castrucci, B. C., Leider, J. P., & Sellers, K., “Perceptions Regarding Importance and Skill at Policy Development Among Public Health Staff,” *Journal of Public Health Management and Practice*, October 2015, 21(Suppl 6), S141–S150.
10. Centers for Disease Control and Prevention, “10 Essential Public Health Services,” *U.S. Department of Health & Human Services*, September 2020.
11. Centers for Disease Control and Prevention, “Social Determinants of Health (SDOH),” *U.S. Department of Health & Human Services*, January 2023.
12. Council on Linkages Between Academia and Public Health Practice, “Core Competencies for Public Health Professionals,” *Public Health Foundation*, October 2021.
13. Chanturidze, T., Adams, O., Tokezhanov, B., Naylor, M., & Richardson, E., “Building Policy-Making Capacity in the Ministry of Health: The Kazakhstan Experience,” *Human Resources for Health*, April 2015, 13, 4.
14. Gupta, S. D., Sharma, S. K., Kumar, S., Sharma, N., & Jain, A., “Self-Assessment of Public Healthcare Facility in Conformity with Accreditation Guidelines for Quality Services,” *Journal of Health Management*, June 2023, 25(2), 156–161.
15. Government of Canada, “Social Determinants of Health and Health Inequalities,” *Public Health Agency of Canada*, January 2023.

16. Hahtinen, L., Mattila, E., & Närhi, K., “The Role of Age and Digital Competence on the Use of Online Health and Social Care Services: A Cross-Sectional Study,” *Digital Health*, March 2022, 8, 20552076221074485.
 17. Harvard T.H. Chan School of Public Health, “U.S. Public Health Workforce Challenges and Solutions,” *Harvard T.H. Chan School of Public Health*, May 2023.
 18. Hearne, S., Pollack Porter, K. M., & Forrest, K. S., “Strategic Skills for Public Health Practice: Policy Engagement,” *APHA Press*, August 2023.
 19. Inayat, S., Younas, A., Andleeb, S., Rasheed, S. P., & Ali, P., “Enhancing Nurses' Involvement in Policy Making: A Qualitative Study of Nurse Leaders,” *International Nursing Review*, July 2023, 70(3), 297–306.
 20. Kant, S., Gupta, S. K., Patnaik, S. K., & Pillay, R., “Analyzing Competencies of Indian Healthcare Leaders: Way Forward for the Next Generation,” *International Journal of Research Foundation of Hospital & Healthcare Administration*, September 2015, 3(2), 47–53.
 21. Karsikas, E., Meriläinen, M., Koivunen, K., & Kanste, O., “Health and Social Care Managers' Self-Assessed Competence in Knowledge Management: A Descriptive Cross-Sectional Study,” *Journal of Advanced Nursing*, February 2025, 81(2), 787–797.
 22. National Academies of Sciences, Engineering, and Medicine, “Communities in Action: Pathways to Health Equity,” *National Academies Press*, January 2017.
 23. National Network of Public Health Institutes, “Challenges and Opportunities for Strengthening the U.S. Public Health Infrastructure,” *NNPHI*, June 2021.
 24. Nkwanyana, A., Mathews, V., Zachary, I., & Bhayani, V., “Skills and Competencies in Health Data Analytics for Health Professionals: A Scoping Review Protocol,” *BMJ Open*, November 2023, 13(11), e070596.
 25. Oliver, K., Innvar, S., Lorenc, T., Woodman, J., & Thomas, J., “A Systematic Review of Barriers to and Facilitators of the Use of Evidence by Policymakers,” *BMC Health Services Research*, January 2014, 14(1), 2.
 26. Onwujekwe, O., Uguru, N., Russo, G., Etiaba, E., Mbachu, C., Mirzoev, T., & Uzochukwu, B., “Role and Use of Evidence in Policy-Making: An Analysis of Case Studies from the Health Sector in Nigeria,” *Health Research Policy and Systems*, September 2015, 13, 46.
 27. Perez-Gonzalez, M., & Linhart, H., “Characteristics of Leadership Competency in Nurse Managers: A Scoping Review,” *Journal of Nursing Management*, January 2024, 32(1), 45-58.
 28. Perez, R., “Devolution of Health Services and its Impact on Local Governance in the Philippines,” *Philippine Institute for Development Studies*, March 2019.
- World Health Organization. Regional Office for the Western Pacific, “Data Management Competency Framework,” *World Health Organization*, January

Conflict of Interest

I hereby declare that I have no personal conflict of interest related to the application and submission of my research proposal. I understand that I may be held accountable by Wesleyan University-Philippines, Graduate School, for any conflict of interest that I have knowingly concealed.

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