SUPPORTING ANIZATIONS

How IPAC Hubs Support and Sustain Infection, Prevention and Control within Congregate Living Settings During COVID-19 Pandemic and Beyond: Thunder Bay District Health Unit (TBDHU) IPAC Hub



Authors and Acknowledgments

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Thank you to all of our congregate living setting partners who took the time to thoughtfully contribute and participate in this evaluation. Without all of your hard work, dedication and commitment to Infection Prevention and Control this report would not be possible.

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Overview of IPAC Hub

As part of the province's comprehensive plan, Keeping Ontarians Safe: Preparing for Future Waves of COVID-19, local networks of Infection Prevention and Control (IPAC) expertise (IPAC Hubs) were developed across the province to enhance IPAC practices within community based, congregate living settings (CLS's). Ontario Health identified organizations including hospitals, public health units and others from across the province to lead local IPAC Hubs. These organizations were to work with partners from across the local health system who have IPAC expertise to ensure that specialized guidance and support is available to CLS's through a one-window model.



WHO WE SERVE

The TBDHU IPAC Hub was created to support and enhance IPAC practices within community based, congregate living organizations/ settings within the City and District of Thunder Bay.

These organizations/settings include:

- Long-term care homes funded by the Ministry of Long-Term Care
- Retirement homes
- Residential settings funded by the Ministry of Health
- Residential settings funded by the Ministry of Seniors and Accessibility (MSAA)
- Supportive housing and Shelters funded by Ministry of Municipal Affairs and Housing (MMAH)
- Youth residential settings funded by the Ministry of Children, Community & Social Services (MCCSS)

Irough these new province-wide networks, S partners are able to access IPAC pertise, collaborative assistance and just-inne advice, guidance, and direct support on AC practices.

SERVICES PROVIDED

IPAC Hubs work in coordination with Hub partners (including local hospitals, public health units, Public Health Ontario and others) to deliver the following services based on local needs and priorities, including but not limited to the following:

- IPAC education and training
- Supportive visits and consults to assist settings in outbreak preparedness
- Provide best practice recommendations to strengthen and enhance current IPAC practices, policies, and procedures
- Provide support for IPAC program implementation
- Facilitate a Community of Practice (CoP)
- Maintain a Community of IPAC Champions

OUR TEAM

At the time of conducting this evaluation the TBDHU IPAC Hub consisted of four team members: a coordinator, public health inspector, public health nurse and a program assistant dedicated to improving IPAC preparedness within CLS's with a prevention goal.

Purpose

To enhance and improve IPAC preparedness within CLS's. The Hub acts as a resource for CLS's to understand and address IPAC gaps within their facilities. The IPAC Hub's focus is to provide IPAC support, education and resources.

Mission

Through collaboration and knowledge exchange with our CLS partners, our mission is to: strengthen our partners IPAC knowledge and abilities to implement IPAC measures that will decrease the impact of COVID-19 within their settings; improve quality of life for their staff, residents and families; and advance IPAC preparation within their own individual unique setting.

Goal

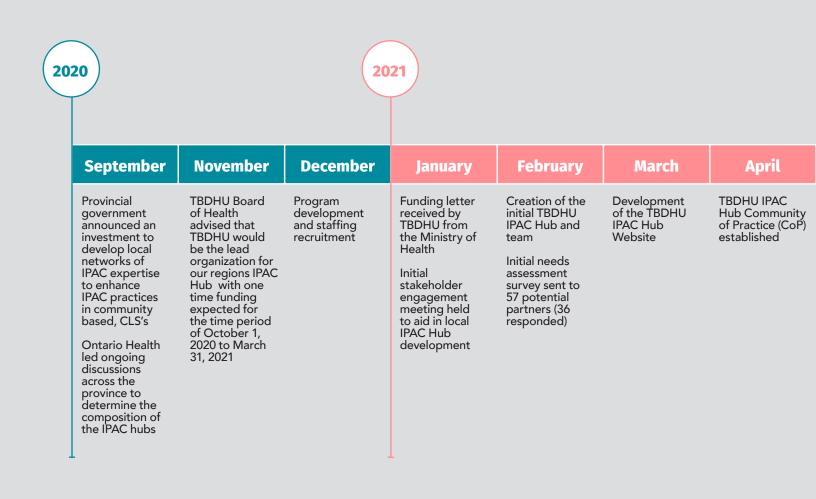
To reduce the number and duration of outbreaks within CLS's that lead to increased morbidity and mortality by early identification and containment of outbreaks within those settings. Through ongoing accelerated and equitable access to the IPAC HUB, settings will strengthen and improve basic IPAC knowledge and practices, increase confidence among workers to implement IPAC best practices with a focus on building and sustaining IPAC capacity within each CLS.

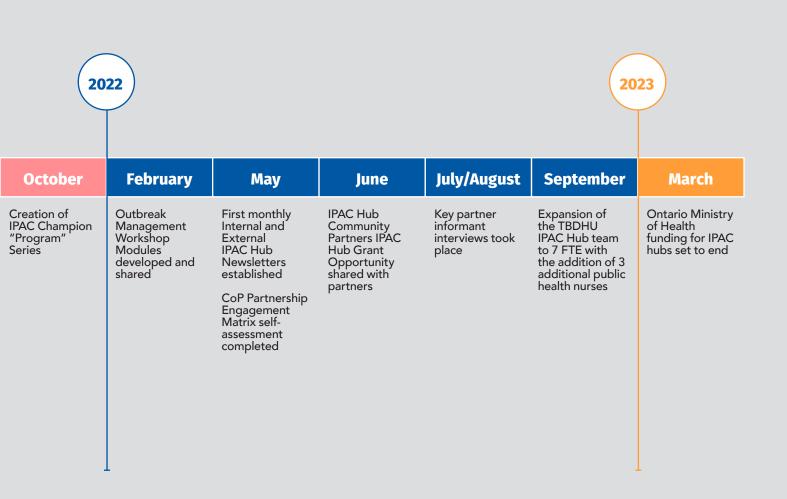
Objectives

Working with our CLS partners, we are striving to:

- Increase awareness of basic IPAC best practice guidance/standards among CLS partners
- Build coordinated IPAC capacity through accelerated and equitable access to IPAC expertise within the hub
- Strengthen already existing relationships and foster new ones with our CLS partners
- Quickly identify and contain outbreaks within CLS's
- Improve IPAC knowledge, skills and practices among CLS partners
- Reduce the number and duration of outbreaks within CLS's that lead to increased morbidity and mortality
- Increase confidence among workers within CLS's to implement IPAC best practices at all times.

IPAC Hub Milestones





Methodology

An evaluation of the IPAC Hub took place from May to August of 2022 and included this time frame; January 2021 to September 2022. The purpose of the evaluation was to:

- 1. document and communicate what the IPAC Hub accomplished during the first 20 months of implementation
- 2. assess the extent to which partners engaged with the IPAC Hub
- 3. describe the impact of the IPAC Hub on organizations
- 4. identify areas of improvement and future directions



Evaluation Methods

The following table describes the evaluation methods used to generate the information in this report.

[
Document review of program records	A survey, adapted from Sudbury and District Public Health, was shared with eligible organizations as the IPAC Hub launch activity in February of 2021. The results were used to set priorities to inform the initial activities of the IPAC Hub. Activities related to each priority were tracked in an excel spreadsheet by the Hub coordinator for reporting purposes. The coordinator also tracked metrics related to other activities and products. A health promotion planner reviewed and extracted metrics for the purpose of the evaluation.
Community of Practice self- assessment	To assess and monitor the effectiveness of the Community of Practice, the IPAC Hub team reviewed several existing self-assessment tools and selected the VicHealth partnership assessment checklist based on relevancy and usefulness. On May 11, 2022, members of the Community of Practice reflected on, discussed and completed the checklist using a consensus model.
Partnership engagement assessment matrix	To demonstrate how the IPAC Hub strengthened current partnerships and brokered new ones, a matrix tool was created in Microsoft Excel that included a set of rows representing each partner and columns comprised of specific measures of interest.
	Measures used in the matrix included the Project Management Body of Knowledge (PMBOK)'s levels of engagement and the International Association for Public Participation (IAP2)'s spectrum of public participation.
	In May of 2022, the IPAC Hub team completed each field in the matrix. The program evaluator analyzed the data in Microsoft Excel. Descriptive statistics were generated using pivot tables and two sample t-tests ($p \le 0.05$) were performed to determine differences between two groups.
Key informant interviews	Semi-structured telephone interviews were conducted with partners from a variety of sectors in June and July of 2022. The purpose of the interviews was to deepen our understanding of the changes that resulted from the IPAC Hub and to obtain feedback regarding future directions.
	Partners were selected for interviews using a purposive sampling strategy to identify partners who were highly engaged with the IPAC Hub and therefore, could provide rich information regarding the impact of the IPAC Hub and provide the best insight into next steps. Twenty partners were selected for interviews, 14 partners agreed to being interviewed and 12 partners completed an interview.
	Interviews were conducted by two health promotion planners from the health protection division at TBDHU. The program evaluator at TBDHU analyzed the interviews using NVivo software.

IPAC Hub Priorities and Support

PRIORITIES

To identify the support and services CLS partners required, a survey was distributed (February 2021) to assess their needs. Partners identified their IPAC needs and the HUB clarified these into the three top priorities for the hub. The services and supports provided were tailored to the specific facilities and offered to those in the greatest need first.

Priority 1 Provide recommendations to strengthen current IPAC practices during COVID-19 outbreaks	Support settings with additional IPAC training needs identified during COVID-19 outbreaks (i.e. on-site PPE training, hand hygiene training, proper donning and doffing training) and assistance with implementing or enhancing IPAC practices in place during the outbreak (i.e. auditing, IPAC policy and procedures, enhanced cleaning)	56 settings supported during COVID-19 outbreaks31 unique organizations16 sectors covered
Priority 2 Review CLS's COVID-19 Preparedness and Prevention Plans and provide recommendations to strengthen current plans	Conduct on-site visits and/ or consultations to ensure the applicable COVID-19 Preparedness and Prevention Checklists are completed (i.e. reviewed and updated) for each setting or location and provide recommendations to strengthen current plans	63 on-site assessments completed44 unique organizations17 sectors covered
Priority 3 Support IPAC education and training for management and staff of CLS's	Identify and provide tailored in person and/or virtual IPAC education and training with COVID-19 focus, including but not limited to, routine practices, additional precautions, personal protective equipment (PPE) training, proper donning/ doffing and auditing to management and staff of CLS's	 60 individual tailored sessions hosted 20 unique organizations 12 sectors covered

SUPPORT

Based on CLS partners' local needs and priorities, the IPAC Hub set out to structure and deliver IPAC support and services previously not available to them. The following highlights several services and supports the IPAC Hub was able to provide: on-site IPAC support, IPAC Extender deployment, IPAC education and training, recommendations to strengthen and enhance current IPAC practices, IPAC Hub Newsletter distribution, facilitation of a community of practice (CoP) and mentoring a community of IPAC Champions.

ONSITE IPAC SUPPORT VISITS

To support CLS partners, the IPAC Hub team completed 154 supportive on-site visits. While onsite, the team provided settings and staff in-themoment IPAC training and education, completed IPAC Preparedness and Prevention Audits, provided best practice recommendations to strengthen and enhance current preparedness plans, supported audit training and assisted settings during outbreaks to ensure measures were in place and adhered to. **154** onsite support

70 unique organizations



IPAC EXTENDER DEPLOYMENT DURING OUTBREAKS

To support CLS partners experiencing COVID-19 outbreaks, IPAC Extenders were available in partnership with our North West Local Health Integration Network. The IPAC Hub and initially TBDHU Environmental Health public health inspectors with support from Public Health Ontario provided orientation to local IPAC extenders and facilitated their deployment to local CLS's. IPAC Extenders along with the IPAC Hub supported several of our local settings by assessing IPAC-related issues, processes, gaps identified and facilitated the need for training in the proper use of personal protective equipment (PPE), hand hygiene, environmental cleaning, and other IPAC-related topics. Extenders and the IPAC Hub provided settings ongoing IPAC support during COVID-19 outbreaks that affected our most vulnerable and precariously housed individuals within our community.

* Other CLS settings such as Long-term Care Homes were supported by IPAC Extenders prior to the creation of the IPAC Hub which are not reflected above



34 shifts worked by 3 local IPAC extenders

130 hours 3 local IPAC extenders worked

IPAC EDUCATION AND TRAINING

The IPAC Hub continuously worked to improve and increase IPAC knowledge, skills and practices among CLS partners. Increasing IPAC knowledge empowered individuals to strengthen and enhance IPAC practices within their own organizations/settings with prevention as the ultimate goal. IPAC education and training sessions were tailored to each organization and training opportunities were made available through various media venues. IPAC learning modules and videos were created and posted on the Hub website to ensure training was accessible to all partners. Through in-the-moment IPAC education opportunities, on-site visits, phone and email consultations and individual meetings with our partners the Hub was able to increase awareness of basic IPAC best practice guidance/standards among CLS partners and offer IPAC education at opportune times. Through education and training, the IPAC Hub was able to build IPAC expertise within each CLS and lay the needed foundation for infection prevention and control.

WEBSITE USAGE BY PARTNERS

	Views	Users
Infection Prevention and Control: Hub	334	167
IPAC Champions	168	89
IPAC Hub Posters & Resources	113	65
PPE How-To Videos	107	68
Outbreak Modules	87	36
IPAC Hub Break Area Poster	17	14
IPAC Hub Donning Putting on PPE universal masking	12	11
IPAC Hub Smoking Area Poster	11	8

RECOMMENDATIONS TO STENGTHEN AND ENHANCE CURRENT IPAC PRACTICES

Throughout the pandemic CLS partners looked to the IPAC Hub team to strengthen IPAC practices within their own unique settings. During on-site visits and consultations with the IPAC Hub, settings and staff welcomed recommendations that assisted settings to strengthen their IPAC practices, outbreak preparedness plans and mitigated spread of respiratory illnesses within.

DISTRIBUTION OF IPAC HUB NEWSLETTER

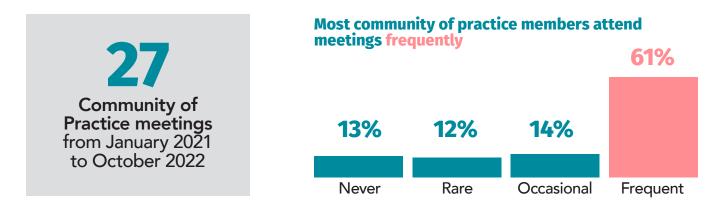
In May 2022, the IPAC Hub created and distributed their first IPAC Hub Newsletter to external IPAC CLS partners. The newsletter was created as a way to keep our partners up to date on the latest IPAC Guidance, Best Practices and ensure settings kept IPAC in the forefront each month. Each newsletter focused on an important IPAC practice and provided tips that settings could utilize to promote IPAC internally. It also reminded settings how to reach the Hub for their support and services.



FACILITATE A COMMUNITY OF PRACTICE (COP)

In April 2021, the IPAC Hub CoP was created and established to provide a platform to connect those working within CLS's an opportunity to network, learn, share and support one another. Meeting monthly provided an open platform to share resources (IPAC policy and procedures/protocols), discuss innovative ideas, collaborate, problem solve and offer recommendations to strengthen IPAC Practices. The CoP also allowed members a judgment free, open space to offer insight and discuss barriers associated with implementing IPAC into their organizations. This platform was also used to update partners on the ever changing guidance documents, orders and legislation throughout the pandemic.





The Community of Practice underwent a self-assessment of their partnership in May of 2022. The score generated from the assessment indicated that the Community of Practice is

"A partnership based on genuine collaboration has been established. The challenge is to maintain its impetus and build on the current success."



Members of the Community of Practice agreed that:

- There is a perceived need, clear goal and shared understanding and commitment
- Partners are willing to share their ideas, resources, influence and power
- Benefits of the partnership outweighs the costs
- There is leadership support from each organization
- Partners have the necessary skills for collaborative action
- Roles, responsibilities and expectations are clearly defined and understood
- Administrative, communication and decision-making structure is as simple as possible
- Partners are involved in planning and setting priorities

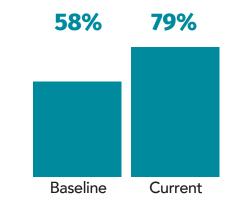
Areas to work on:

- Strategies to enhance the skills of the partnership through increasing the membership or workforce development
- Regular opportunities for informal and voluntary contact between staff from the different agencies and other members of the partnership

MAINTAIN A COMMUNITY OF IPAC CHAMPIONS

To build IPAC capacity within CLS's and to strengthen partners IPAC knowledge, the IPAC Hub created a community of IPAC Champions. CLS's were asked to designate an IPAC Champion who would be dedicated to improving IPAC Practices within their own setting. The Hub provided training and ongoing support and mentoring to IPAC Champions to build their IPAC knowledge and increase their confidence to implement IPAC best practices at all times. IPAC Champions advocate and promote positive change within their setting by modeling the desired positive IPAC behavior and are instrumental in positive change within their own organization.

More partners have a designated IPAC lead since working with the IPAC Hub



Baseline: when the partner first started working with the IPAC Hub Current: at the time of the evaluation (May 2022)



Partnership Engagement and Commitment to IPAC

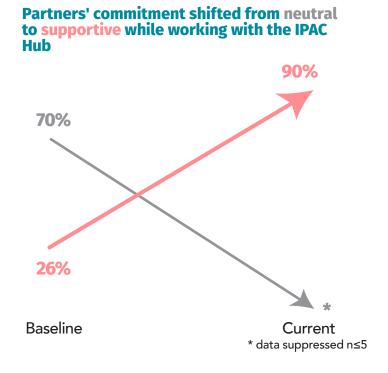
Partner's level of engagement and commitment to IPAC was evaluated. Using an engagement matrix our team looked at each partner's level of engagement to IPAC prior to working with the IPAC Hub and worked to identify challenges and restraints that effected the organizations level of engagement and commitment to IPAC as the pandemic evolved.

Most partners (79%) had an existing relationship with the health unit prior to the IPAC Hub. The majority of new partners were from adult development/intervenor congregate settings, mental health and addiction adult congregate settings, shelters as well as Ministry/professional partners.

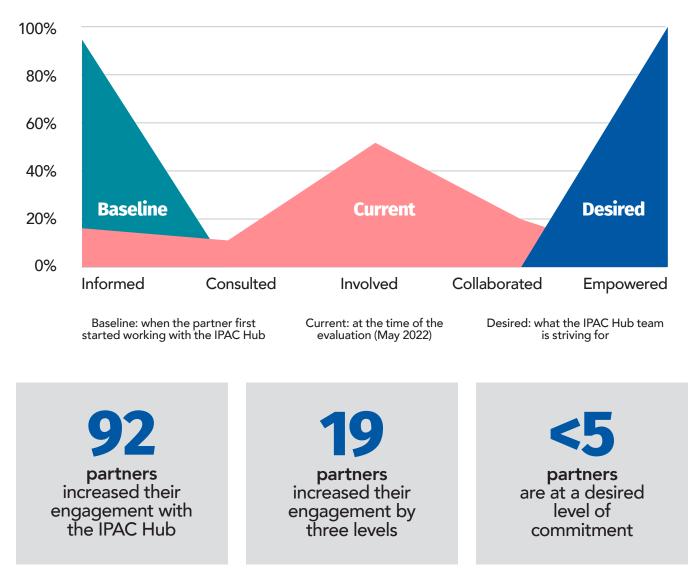
Engaged partners listed by organization type

6%	Hospital	
7%	Longterm Care	
7%	Child & Youth Mental Health	
7%	Mental Health/ Addictions	
7%	Ministry/Professional	
8%	Assisted Living	
8%	Shelters	
29%	Supportive Housing	

Some settings such as Long-term Care Homes and Hospitals received the most direct guidance and directives from their respective Ministries, however only collectively make up 13% of our engaged partners. 29% of our engaged partners came from supportive housing, whom had the least direct guidance and required the most IPAC support and education.



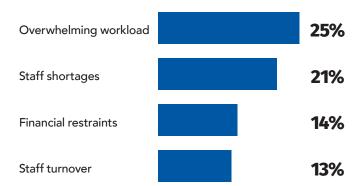




Partners have become more engaged since working with the IPAC Hub

52% are currently involved

Percentage of partners facing specific challenges and constraints affecting IPAC



How challenges and constraints affected knowledge, commitment and engagement

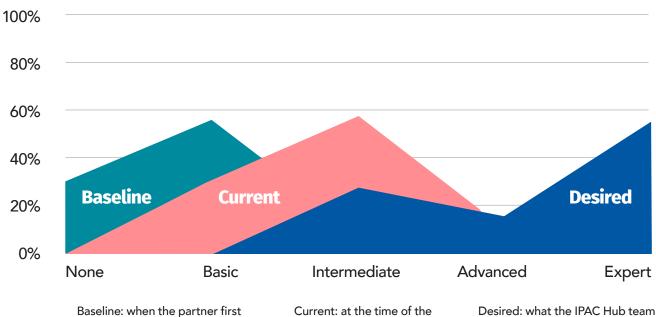
- Partners from organizations with staff turnover have a lower level of knowledge compared to partners who do not face that challenge (statistically different, t(20)=3.6,p=0.001)
- Partners from organizations with financial constraints have a lower level of commitment compared to partners who do not face that challenge (statistically different, t(15)=2.1,p=0.03).
- Partners from organizations with staff shortages have a lower level of knowledge, commitment and engagement compared to partners who do not face that challenge (statistically different, t(28)=2.8,p=0.005 (knowledge), t(24)=2.1,p=0.02 (commitment), t(35)=2.2,p=0.02 (engagement).
- Interestingly, partners with overwhelming workloads have a higher level of engagement compared to partners who do not face that challenge (statistically different, t(38)=1.8,p=0.04). More partners with overwhelming workloads (52%) 'collaborate' compared to partners without overwhelming workloads (10%). The majority of partners without overwhelming workloads (61%) are 'involved'.

Impact

KNOWLEDGE

Most partners (57%) have an intermediate level of IPAC knowledge which has increased since the beginning of the IPAC Hub where the majority had only a basic level of knowledge. A total of 88 partners increased their knowledge of IPAC while working with the IPAC Hub with 11 of those partners increasing their knowledge by two levels. According to the IPAC Hub Team, 10 partners are at a desired level of knowledge.

Partners' IPAC knowledge improved since working with the IPAC Hub



57% currently have intermediate knowledge

started working with the IPAC Hub

Current: at the time of the evaluation (May 2022)

Desired: what the IPAC Hub team is striving for

CONFIDENCE

Interviews revealed that partners gained confidence from working with the IPAC Hub. The support provided by the Hub gave partner organizations the certainty and assurance they needed to navigate guidance, execute plans, and implement IPAC practices. For some partners, the Hub acted as "an authority" which increased their credibility and helped gain acceptance among clients and staff. One participant noted that the confidence gained by their staff resulted in staff retention during the COVID-19 pandemic.

"I want to say our confidence as an organization. So, if I think back to early on in the pandemic, we [were] inundated with directives, guidance documents, public health direction... We were just overwhelmed, and I think when we were able to reach out to the health unit, it helped to put everything into perspective."

"Just the staff knowing that we are coming from a place of the health unit and the IPAC Hub is helping us when we're putting out memos and things. They instill a lot more confidence in us as management... because we know that when we're putting these things in place, they've definitely been guided and directed by the experts." "I think that helped with even staff retention. At the beginning of COVID, we had a lot of staff... they were scared, so a lot of people were, "I don't know if I can continue working during COVID." They weren't sure, but with just the implementation of that training that we had from the IPAC Hub, and just their ongoing support, I think it made our staff feel a lot more comfortable and helped us retain staff."

AWARENESS

Interview participants discussed how the Hub increased awareness of IPAC. In particular, staff at partner organizations increased their awareness of their own practices including hand hygiene, cleaning and the use of personal protective equipment (PPE). Increased awareness was also evident for clients and users of the services provided by partner organizations.

"I don't think we didn't value IPAC in the past. We did, but there's certainly more awareness now, and to have IPAC as a support is, for me, invaluable."

"I think staff are more aware of how they are doing things and the equipment they're using and cleaning and all of those sorts of things." Increased awareness in turn brought IPAC to the forefront and led to advancements in IPAC practices at some partner organizations.

"So, this aspect and the healthcare, the personal support that our frontline staff give, making sure they're protected with PPE, making sure that the supplies are there, all that sort of stuff hasn't always been at the forefront, but I've been able to move it more to the forefront with the assistance of the Hub and the support and all the education that we've received."

"...many of us, and many of the organizations we support weren't aware of what it could have been doing and are now doing better than they have in the past. So, there's gonna be a longstanding policy and procedure resulted from it, and I think that just continues the benefit of having this Hub..."

"Everybody believed they were taking appropriate steps to reduce risk and mitigating concerns of spread. However, the IPAC Hub really laid out detail, provided materials, provided information on the importance of and what to do appropriately, the training that came with it... it just shone a light on the importance in the detail, and that stepped everybody's game up quite a bit."

ACCESS

Several interview participants reported how the IPAC Hub improved access to information and support. For one partner, the support provided by the Hub changed how they normally viewed visits from a public health inspector.

"I think this is the most supported I've felt in my role since I've taken on this role, really, in regards to this aspect of health and safety..."

"I think everything that I've needed, it's been at the tip of my fingertips, the slides, anything I need is right there..."

"So, being able to give us feedback and training videos regarding, for example, donning and doffing, that kind of educational information. We didn't have to go looking for it. It was readily accessible for us, so that was very, very helpful." "I will say that the first time that [the public health inspector] came over unannounced, I was, oh no, what did we do wrong? But she said, no, no, no, that's not what this is. You know, like a health inspector, right, but that fear or that uneasiness went away really quickly because we just fully recognized, and any portion of the whole community does, that they're just here to help, and they've been just amazing, and I think that we made it through this last couple of years because they were there to support us."

OUTBREAKS

Support and guidance from the IPAC Hub also resulted in partners being able to prevent and manage COVID-19 outbreaks at their organizations.

"I thought it was really helpful for us as an agency, when we had an outbreak, to be able to have a resource to say, "Okay, this has happened. We have all the documentation. Can you give us some guidance, specifically around this issue?" And they were able to give us that, so I think ongoing, that's a really important piece, that IPAC is still there to be able to give some guidance for people."

"...what happened is [the IPAC Hub team],

they were all on it, helping us build the policies, like I said. I guess they're not really policies, but just procedures, like how we're gonna move forward through this. We haven't had an outbreak since, so obviously that's a very big change from their impact..."

CLIENT SAFETY

Due to the implementation of IPAC measures, some interview participants reported that clients felt their care and safety were being taken seriously.

"...from a client perspective, is the health unit, as well as all the guidance documents, I think our clients, our participants felt safe. I think they felt like we were doing everything we could to insure that not only their stay with us was as good as we could make it, but we also kept everybody safe, and we were doing it for the right reasons."

"...they felt that they were being taken care of seriously. They really acknowledged that the care that they received was very important to them, and that they felt that they were treated respectfully and not in a way that was intrusive to the treatment needs that they were receiving."

Future Direction

PARTNERS' SUGGESTIONS FOR FUTURE DIRECTIONS



There is a place for the hub moving forward



Less frequent meetings with ability to ramp up



Keep the lines of communication open



Continue to offer education sessions and "refreshers"



Provide ongoing support and resources



Collaborate with others hubs

"...now that it's established, even if things take a bit of a hiatus or slow down in terms of Hub participation, and there's less communication, if there were an incident or need, my thinking is the Hub could spring back into action. They immediately would call a meeting, get people together, people that haven't met in six months. There's a structure now in place."

"I think there's a place for the IPAC Hub for general things moving forward. To be completely honest with you, two years ago I didn't even understand what the acronym stood for, and I don't think IPAC will go away after COVID, so I think there's a place for this Hub in terms of our day-to-day business moving forward." In preparation for the anticipated busy fall/ winter of 2022/23, the IPAC Hub expanded with the addition of three Public Health Nurses. This team expansion enabled the Hub to take on an increased role within respiratory outbreaks in all CLS's.

The team has been working on increasing capacity and enhancing their IPAC expertise. Our IPAC Hub Coordinator obtained the Certification in Infection Control (CIC©) designation in June 2022. Currently three additional team members are also actively working to obtain this designation with plans to write within the next 6 months. Having additional certified staff will enable our IPAC hub to offer increased support to all CLS partners, especially to our long term care homes that now have a requirement to have a CIC© designated staff member within all homes.

Conclusion

We are optimistic that the IPAC Hub will be able to continue in some capacity beyond June 2023, (internally the IPAC Hub team has been extended an additional three months) allowing our team to offer continued support to our local CLS partners. Our team has created long-term goals that can only be fulfilled if our important work continues. Infection prevention and control goes beyond COVID-19 and pandemic planning and our Hub could assist our partners in continuing to keep IPAC in the forefront. Stable, permanent funding would allow for the achievement of our long-term goals including: improving IPAC knowledge, skills and practices among CLS partners; reduction of the number and duration of outbreaks within CLS's that lead to increased morbidity and mortality; and ultimately increase the confidence of workers within CLS's to implement IPAC best practices to protect both themselves and those they care for during an outbreak.





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