Quality Assurance Indicators for Advanced Pharmacy Practice Experiences (APPE) Placement Site Visits

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Introduction

- Experiential learning is a key component in the pharmacy curriculum as it allows students to apply their learning in real-world situations.
- Pharmacy schools need to ensure that students are not only gaining more hours during their practicum, but also are receiving quality education.
- The PharmD curriculum involves earlier and greater exposure to experiential learning compared to the BScPhm curriculum.[1]
- Due to a lack of standardization, students and preceptors have reported adverse factors at experiential learning practice sites.[2-4]
- Creation of Key Quality Assurance Indicators (KQAIs) for Advanced Pharmacy Practice Experiences (APPE) site visits will enable pharmacy schools to identify areas of improvement.

Objectives

- To generate a consensus for Key Quality Assurance Indicators (KQAIs) for APPE site visits from Canadian pharmacy schools (Table 1).
- To suggest an algorithm for APPE site visits for QA purposes (Figure 2).
- To increase awareness of the benefits of implementing standardized policy and procedures of KQAIs for APPE site visits.

Method

FIGURE 1.
Method

1. Perform literature review
2. Develop survey
3. Recruit PEP-C Members
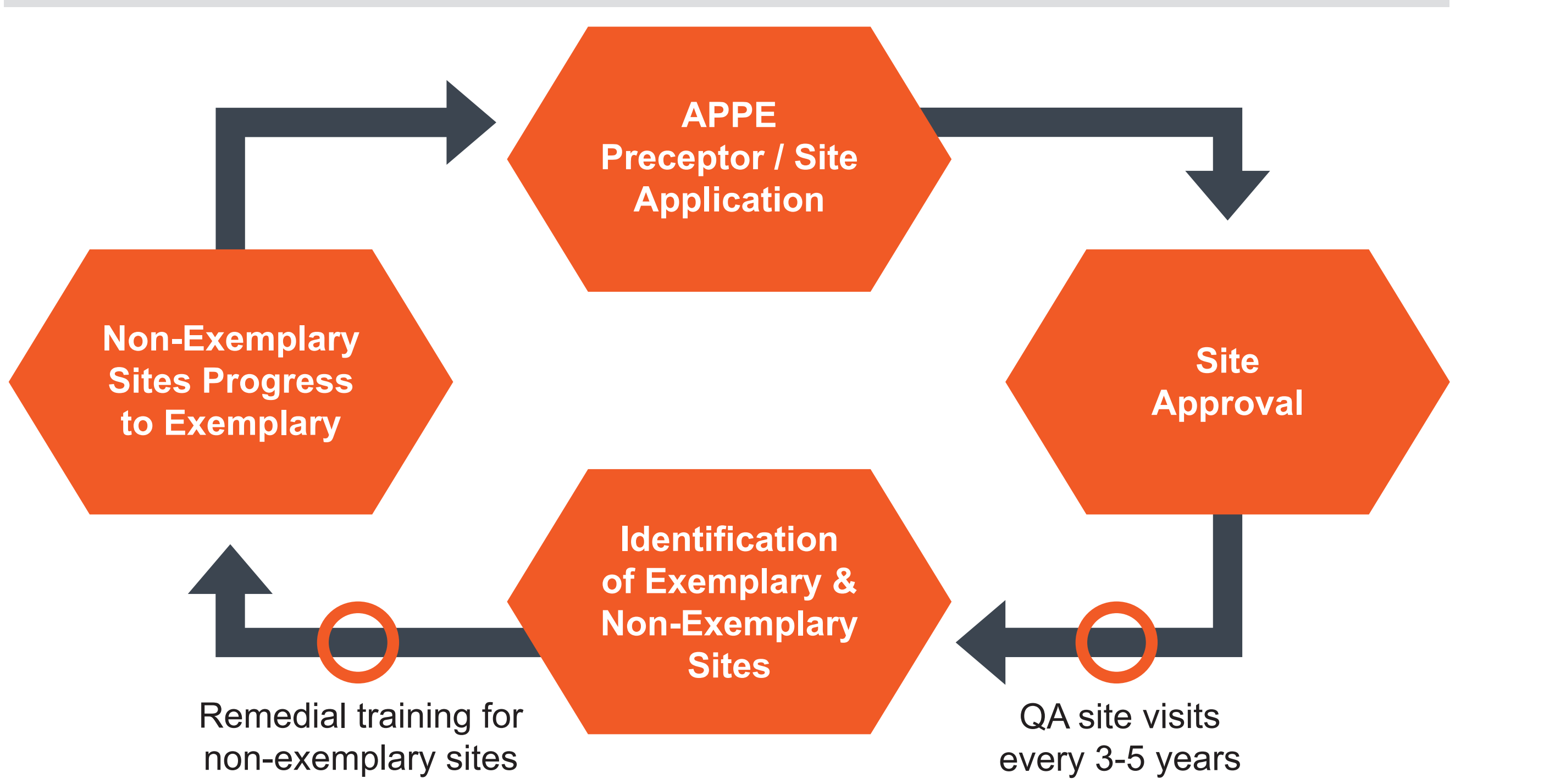4. Administer Delphi Survey Round 1
5. Administer Delphi Survey Round 2

- Pharmacy Experiential Programs of Canada (PEP-C) is an Association of Faculties of Pharmacy of Canada (AFPC) affiliated committee established to enhance pharmacy experiential education in Canada.[5]
- We proposed four categories of KQAIs (Tables 2-5) to PEP-C members and asked them to rank KQAIs from the most important to the least important.[6]
- Scores were standardized to a denominator of 10 to facilitate comparisons between Round 1 and Round 2 Delphi survey results. The least important KQAI from each category was eliminated from Round 2 of our Delphi survey (Tables 2-5).

Results

- At least one PEP-C member from each pharmacy school/faculty (Table 1) in Canada responded to our Delphi surveys.
- 33% faculties do not perform site visits or only perform them when required.
- 33% faculties visit less than 5% APPE sites each year; 22% schools visit 5–20% of APPE sites each year; and only one school visits almost 60% of their APPE sites each year.
- We proposed an algorithm for APPE site visits for QA purposes (Figure 2):
  - Conduct proactive site visits every 3-5 years (greater frequency if needed);
  - Provide response and action plans to complaints as required;
  - Offer remedial training to address areas of improvement, develop solutions, and strengthen faculty-site relationships.

FIGURE 2.
A Suggested Algorithm for APPE Site Visits for QA Purposes

Non-Exemplary Sites Progress to Exemplary → APPE Preceptor / Site Application → Site Approval → Identification of Exemplary & Non-Exemplary Sites

Remedial training for non-exemplary sites

QA site visits every 3-5 years

Conclusion

- There is a current lack of pro-active APPE site visits for quality assurance purposes.
- Quality assurance of APPE sites is required to identify exemplary, learner-centered, and non-exemplary APPE sites.
- An APPE site visit checklist will help pharmacy schools/faculties identify areas of improvement in APPE sites.
- The Office of Experiential Education of pharmacy schools/faculties need to strengthen relationships with APPE sites to:
  - Encourage exemplary sites to maintain their status; and
  - Coach non-exemplary sites to become exemplary.

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TABLE 1.
Pharmacy Schools/Faculties in Canada

BScPhm Program	PharmD Program First PharmD Class Not Yet Graduated	PharmD Program First PharmD Class Graduated
Dalhousie University	Memorial University of Newfoundland	Université de Montréal
University of Manitoba	University of Alberta	Université Laval
	University of British Columbia	University of Toronto
	University of Saskatchewan	University of Waterloo

TABLE 2.
KQAI Category 1 – Learning-Centered Environment

KQAI	ROUND 1 Survey Results (Score Out of 10)	ROUND 2 Survey Results (Score Out of 10)
Student has access to drug information sources, patient records	8.15	7.85
Student has defined roles and responsibilities	7.78	8.31
APPE site allows for development of interprofessional relationships	5.37	4.67
Student takes part in self-directed learning	5.37	4.62
Student has adequate physical space to work	4.63	4.46
Number of students at the site is appropriate	3.70	N/A

TABLE 3.
KQAI Category 2 – Preceptor Related Indicators

KQAI	ROUND 1 Survey Results (Score Out of 10)	ROUND 2 Survey Results (Score Out of 10)
Preceptor provides student with regular and consistent feedback	8.89	8.31
Preceptor displays passion / enthusiasm for teaching / mentoring	6.85	5.85
Preceptor is accessible, and amount of time spent with student is appropriate	6.30	5.38
Preceptor provides appropriate amount of supervision throughout rotation	5.37	5.54
Preceptor demonstrates professionalism for role model for student	4.44	4.92
Preceptor responds to student's questions clearly and in a timely manner	3.15	N/A

TABLE 4.
KQAI Category 3 – Student Related Indicators

KQAI	ROUND 1 Survey Results (Score Out of 10)	ROUND 2 Survey Results (Score Out of 10)
Student is involved in all aspects of pharmaceutical care process	8.06	9.74
Student provides education and counseling to patients on prescription and over-the-counter (OTC) medications	7.78	5.38
Student is involved in expanded scope of practice activities	5.00	4.87
Student is involved in documentation	4.17	N/A

TABLE 5.
KQAI Category 4 – Rotation Organization

KQAI	ROUND 1 Survey Results (Score Out of 10)	ROUND 2 Survey Results (Score Out of 10)
There are clear learning objectives	7.33	7.50
Activities and projects are planned to meet and fulfill learning objectives	6.22	6.15
Staff members are supportive of APPE program and student	6.00	4.62
There is written midpoint and final evaluation with specific examples of student behaviour used in evaluation of performance	5.78	6.73
Standard orientation/training is provided	4.67	N/A