# Instituting the Role of Physician Assistants in Emergency Departments

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## Abstract

## Background

In 2016 Israel's Ministry of Health (MoH) embarked on a multi-dimensional initiative to improve the level and quality of service of emergency departments (EDs). This initiative included a decision to institute the role of physician assistants (PAs) in EDs as an aid to physicians in the performance of their varied activities. Although discussed previously, the establishment of the role in Israel only matured in 2016. In 2012, the Director-General of the Israeli Ministry of Health (MoH) assembled a committee to examine the need for PAs (the Physician Assistant Committee, 2013). The committee concluded that the health system could benefit from the addition of PAs. It recommended that the first such roles be created on the basis of an existing profession and regulated by the Physicians Ordinance. In May 2016, a specific course began at the Sheba Medical Center to train PAs for EDs. Another recommendation by the committee was that the process of PA integration be supported by accompanying research. As a result, the MoH asked the Myers-JDC-Brookdale Institute to evaluate the integration of PAs into EDs.

The goal of the study was to evaluate the integration of PAs into Israeli EDs from the perspectives of hospital directors and ED managers, as well as ED physicians and the PAs themselves.

### Methods

The study was divided into three parts to permit an examination of the perspectives of each of the parties involved in the integration process. In the first part, there were two rounds of in-depth interviews with hospital deputy-directors, and ED managers and physicians where PAs had been introduced (33 interviews). The first round took place from May to December 2016, the second – from May to November 2017. In the second part of the study, an on-line survey was conducted of 129 members of the Israeli Association for Emergency Medicine (IAEM – June to August 2017). The survey dealt with the PAs' duties and the extent of their assistance. The third part contained two questionnaires administered to participants of the first PA training cohort, one at the beginning of training (May 2016), the other a year later (June 2017). At the start of training, respondents were asked about their motives for choosing the PA profession, and their expectations of the new role. At the end of training, they were asked about the difficulties and challenges of the role, and the extent to which it had met their expectations.

## Findings

In the in-depth interviews, all the ED physicians and managers stated that they were highly involved in integrating the PAs into EDs. The expectations of the ED managers concerning the new role were varied. Some managers compared it to the PA position in the US, which is an established profession with PAs there permitted to perform a variety of medical interventions. Others failed to understand the need for the new role or to distinguish it from nursing. Hospitals in which the managers had set high expectations regarding the new role tended to grant the PAs broader authority. The integration of the role into EDs differed in form by hospital and was adapted to each. Most ED managers said that the PAs assisted only physicians, whether out of principle or necessity (because of opposition to the new role from nursing staff). Most managers reported that the PAs had integrated successfully with the ED staff and workwise, on both the professional and interpersonal levels. However, at most hospitals, we did hear of opposition, to varying degrees, from the nursing staff. Other difficulties concerned the definition of the role, the level of training, and low remuneration.

According to the survey of IAEM members, some 60% of the 70 physicians who worked in an ED with PAs ranked the extent of the assistance they provided for various ED duties as great or very great. Nonetheless, there were considerable differences in the degree of autonomy granted to the PAs in the different hospitals. The overriding majority of physicians (23) from EDs that had did not have a PA (altogether 27 physicians) said that they were interested in adding this type of role to the ED.

In the PA survey, respondents were asked to rate the degree to which each factor (from a pre-prepared list) had attracted them to the new role. We found that between the beginning and end of the course, there was a substantial decline in how they rated the factors of attraction. The most prominent decrease concerned the chances of better remuneration or career advancement.

Relatively few PAs reported difficulties in working with physicians or integrating with the ED team; 44% reported very little or no resistance at all from the nursing staff while 25% reported that they did feel resistance to a great or very great extent when working with the nursing staff. Satisfaction with the decision to become a PA was very high at the beginning of the course. A year later, satisfaction had decreased considerably though it remained high. A negative correlation was found between the PAs' level of satisfaction and their sense that the new role had not met their expectations.

## Discussion

The findings indicate that the process of incorporating the PA role into EDs is well under way, the role is taking shape satisfactorily, and most of the parties concerned are aware of its potential. PAs are preforming several clinical procedures and contributing to the ED workload. At the same time, the challenges that emerged from the study warrant attention. One salient challenge that cropped up repeatedly was the great variation between hospitals in their definition of the PA role and its accompanying authorizations. We recommend that policymakers review the topic in depth and devise ways to regulate and anchor PA authorizations in EDs. This would help realize the potential of the role and lead to its standardization across hospitals. We further recommend that the integration of PAs into other departments be explored to help ease both the shortage of care professionals and the workload of the medical staff.

## **Executive Summary**

## Background

A new role of physician assistants (PAs) was introduced into Emergency Departments (EDs) in Israel in 2016. PAs are assigned to physicians to help out with a variety of duties. In introducing PAs, Israel has joined a global trend of creating new healthcare roles and positions in response to various problems, such as the inadequate supply of medical services to peripheral areas and the shortfalls of the medical workforce in certain specializations.

The establishment of a PA role in Israel had long been discussed but only matured in 2016. In 2012, the Israeli Ministry of Health (MoH) assembled a committee to discuss the need for such a role (the Physician Assistant Committee, 2013). The committee concluded that the health system could benefit from the addition of PAs. Additionally, it was decided that the first PA roles would be created on the basis of an existing profession (see below) and regulated by the Physicians Ordinance. In 2015, a Director-General's Circular was issued publicizing the conditions for the training and employment of PAs, and listing the authorizations they were to be granted. Concomitantly, the MoH embarked on a major multi-dimensional initiative to improve the level of service and quality of care in EDs, allocating more than NIS 100 million for the task. The decision to add the PA role to EDs was part of that initiative. In May 2016 a course was launched by the MoH training center at the Sheba Medical Center to train PAs for EDs.

Admission requirements were either a bachelor's degree and five years of experience as a paramedic, or an MD degree (for graduates of medical studies abroad who had not passed Israel's government licensing exam). The course was 11 months long. It consisted of two weeks of theoretical studies followed by a week of theory at the MoH, and the rest of the time devoted to practical work to gain clinical ED experience, each PA at their own ED. The hospitals managed the recruitment and admission of PAs and every hospital was permitted to hire up to three. The first course had 34 participants. ED managers recruited the candidates, were involved in determining the content of the training in EDs, and led the practical work of clinical experience.

The Physician Assistant committee had also recommended that the initiative of integrating PAs be supported by accompanying research. As a result, the MoH asked the Myers-JDC-Brookdale Institute to evaluate the integration of PAs into EDs.

## Study Goals

The goal of the study was to evaluate the integration of PAs into Israeli EDs from the perspective of hospital directors, ED managers and ED physicians, as well as PAs.

## **Study Design**

**The perspective of hospital deputy-directors, ED managers and physicians**: Two rounds of in-depth interviews were conducted. In the first, from May to December 2016, in-depth interviews were held with hospital deputy-directors, and ED managers and physicians where PAs had been introduced (23 interviews, 10 where ED mangers). In the second – from May to November 2017, 10 ED managers were interviewed. The interviews concerned the structure and management of EDs, emerging problems and challenges, perceptions and expectations of the PA role, the nature of the advance preparation of ED staff, and the means of PA training and integration into the department.

The perspective of members of the Israeli Association for Emergency Medicine (IAEM): An online survey was conducted of 129 IAEM members, with 97 participating (a 75% response rate). The survey concerned the PAs' duties in EDs and the extent to which ED physicians felt that the assistants helped them preform those duties. The survey was held a year after the PAs integrated into EDs, from June to August 2017.

The perspective of PAs: Participants of the first PA training cohort completed two questionnaires, one at the beginning of training (May 2016), the other a year later (June 2017). At the beginning of training, they were asked about their motives for choosing this new role as well as their expectations and apprehensions; at the end of the training, they were asked about the difficulties and challenges of the new role, and the extent to which their expectations had been realized

## Findings

#### Part I: The perspective of hospital deputy-directors, ED managers and physicians

#### a. General background on EDs

ED staff usually include a manager, a deputy-manager, a nursing director, a team of senior physicians and specialists, and nurses.

The main problems raised by ED interviewees were the heavy workload, workforce shortfalls, shortages of equipment and infrastructures, and staff burnout.

#### b. Physician assistants (PAs)

*Expectations of the PA role* – The expectations of ED managers varied. Some compared the role to that of the same name in the US or to other ED professionals; some described it as in between assistant and physician; others saw no need for it, did not understand how it differed from nursing or the advantage of introducing it into EDs. Nonetheless, about half of the ED managers said that they expected to see the PAs growing with the role itself and ultimately – provided there were suitable training and a readiness to learn and develop – succeeding in attaining the level of residents or "stand-ins" for physicians.

**Roles and authorizations** – The role, as defined in the 2015 Director-General's Circular, left ED managers considerable room to stipulate the authority granted to PAs, primarily for reasons of flexibility and adaptability to individual EDs. We found a correlation between the authority granted to PAs in each hospital and the expectations of ED managers: i.e., managers with high expectations also tended to grant the PAs far more authority.

In some EDs, PAs received singular training, responsibility and duties; e.g., as infarction experts or instructors of ED and hospital staff on diverse topics.

#### c. Integration of PAs into EDs

The extent of integration of PAs into the work was different at each hospital and adapted to that particular institution. Most ED managers said that the PAs assisted only the physicians, whether out of principle or necessity (because of nursing opposition to the role).

Most ED managers reported that the PAs had integrated well in terms of both work and staff, on both the professional and interpersonal levels.

#### d. Contribution to departmental activity

The interviewees expressed satisfaction with the contribution made by PAs to the physicians' work in reducing the time spent by physicians on technical tasks, by virtue of their presence as permanent staff members with ED experience and seniority and, uniquely, as experienced paramedics commanding the skills required in urgent care.

#### e. Addressing integration difficulties

ED managers related several difficulties they had encountered upon the introduction of PAs into the department:

**1. Difficulties with the nursing staff** – Nearly all the managers related to the PA-nursing staff interface as a potential integration problem. To address the difficulty, the managers had adopted several actions, such as separating the duties of the two roles and/or driving home the message that both roles were part of the same staff. All the ED managers emphasized the importance of management support for the introduction of PAs. In the second round of interviews, we found that, apart from a few isolated instances, the managers cited neither the PA-nursing interface nor local nursing opposition as an ongoing, acute problem; the overall consensus was that the situation was under control.

**2**. **Defining the PA role** – One of the problems that emerged from the study was that the PAs and ED staff did not understand the new role.

**3.** Level of training – Some of the ED managers and hospital deputy-directors that we interviewed said that the PAs' level of knowledge was lower than that of other ED staff (e.g., 6<sup>th</sup>-year medical students). Some interviewees said that the MoH training course was too short and did not cover all the topics that they had to deal with. To address this difficulty, ED training was adapted to the specific needs of each ED and considerable knowledge was conveyed during the ED work itself.

**4.** Salary – The salary of PAs was cited as a difficulty throughout training; indeed, it served as a cause for a work strike.

#### f. The future of the PA role

Most senior physicians and managers that we spoke to believe that in the future, the PA role will extend to additional hospital departments, such as surgical or orthopedic EDs, or operating rooms (assisting anesthesiologists). Hospital deputy-directors said they were in favor of introducing a new role into the health system. Taking a broader perspective, some said that in general, the health system was heading in this direction and it would be necessary to establish new professions to fill the gaps in certain areas.

#### Part II: Survey of members of the Israeli Association for Emergency Medicine (IAEM)

Since PAs work primarily with physicians and were introduced into EDs in part to reduce the physicians' workload, it is appropriate that physicians in the main gauge the contribution of the new role to ED work. The survey of IAEM members was conducted at the end of the first integration year, from June to August 2017.

#### a. PA duties of assistance to ED physicians

Some 60% of the physicians of ED with a PA commended their assistance with various duties, to a great or very great extent (e.g., providing clinical care, accompanying patients to hospital wards or for further treatment / diagnosis, conducting intake of new patients, presenting patient cases to physicians, and performing organizational tasks).

#### b. ED duties

We examined the extent that the PAs used their professional discretion to perform the duties listed in the Director-General's Circular. We found substantial variation in the degree of autonomy granted the PAs in the different hospitals. A considerable percentage of the physicians said that in terms of their using their professional discretion, there were several duties performed by the PAs to a great or very great extent; e.g., applying oxygen masks or oxygen glasses (64%), inserting a peripheral IV (56%), and commencing treatment with fluids (49%). However, according to many physicians, there were certain duties that the PAs did not perform or performed to a small or very small extent at their professional discretion; e.g., 50% of the physicians noted that even such basic duties as measuring vital signs were performed by PAs to a small extent or not at all.

#### c. ED duties within PA capability but lacking authorization

Physicians of EDs with PAs were asked about additional duties that, in their view, PAs were able to perform but were not authorized to do so. The most common response was that PAs should have the authority to decide on providing medication (25% of the respondents). Other common responses were: making decisions about administering IVs, performing orthopedic procedures such as stitching and applying a cast, and accompanying patients to, and ordering, imaging tests (ultrasound and x-ray).

#### d. Support for adding the PA role to EDs

Of the physicians that did not yet have a PA in their EDs, 23 said that they would be interested in adding the role to help ease the ED workload, and to benefit from a PA's professional capabilities given the added value of their paramedic training.

#### Part III: Survey of PAs

The survey of PAs polled all students of the first retraining course for paramedics at the Sheba Medical Center (34 participants in the training course; first survey N=33, second survey N=32).

#### a. Elements attracting candidates to the PA role

At the beginning of the course, participants received a list of items and were asked the extent to which each had motivated them to choose the PA role. All the items (professional challenge, chances of advancement, personal fulfillment, upgrading one's professional status) were rated highly (above 90%) apart from the chances of improved remuneration, cited by 73%. A year later, they were asked the extent to which they felt that each of these items had been realized in their work. There was a marked decrease in the rating of all the items between the beginning and end of the course (professional challenge, personal fulfillment, upgrading one's professional status), the greatest drop applying to remuneration (from 73% to 13%) and to chances of advancement (from 97% to 6%).

#### **b.** Challenges of PA work

At the end of training, PAs rated the extent to which they had experienced difficulties at work, again from a closed list of items: 72% cited their limited authority; 48% said that there was no room for advancement; the overriding majority said that they were satisfied to a moderate or small extent with the remuneration. Integration into working with ED staff was not cited as a key difficulty, most said that they felt no difficulty in the work or only to a very small extent – with physicians (72%); with the general staff (53%) and with the nurses(44%). As regards the latter, however, 25% of the PAs did report difficulties, to a great or very great extent.

#### c. Main duties

The work of the PAs appears to be converging on several specific duties. Thus, most PAs perceived the following as part of their role, to a great or very extent: presenting medical cases to physicians (97%); working according to a physician's instructions (81%); keeping records and performing administrative jobs (71%). On the other hand, the role of PA varied between hospitals; some duties (e.g., applying casts and bandages) were performed by few PAs although most respondents said that these procedures were not within their purview as PAs.

#### d. PA authorizations

Authorizations helpful to PA work – On the questionnaire at the end of training (2017), PAs noted the authorizations that help them perform their work, to a great extent: resuscitation (43%), medical intake (41%), administration of medication (34%).

#### Authorizations missing from PA work

On the questionnaire at the end of training (2017), PAs cited the authorizations that they felt were missing from their work: administering medication (59%), performing various medical procedures (44%), giving instructions and signing documents (28%).

#### e. Working conditions and satisfaction with the choice of the PA role

At the beginning of the course, satisfaction with the choice of the role was very high, 91% (were satisfied to a great or very great extent). A year later, satisfaction had decreased yet remained high (75%). We found that satisfaction correlated with various conditions at work: a sense of being part of the ED staff, a sense of challenge and responsibility, work that permitted use of one's professional capabilities, and convenient working hours. Satisfaction correlated negatively with the sense that the PA status was not as they had envisioned.

### Discussion

The introduction of PAs into EDs is an innovative measure in Israel's health system. The announcement of the historic measure was greeted with excitement by interested parties (such as medical staff and potential applicants) and received great media coverage. At the same time, it met with resistance and apprehension from various stakeholders. At the time of writing (January 2019), graduates of the first cohort to complete their formal training were finding their place in EDs around the country, and the second cohort was in the midst of training.

The incorporation of a new role takes time and generally demands a large investment of resources alongside the enlistment and cooperation of existing staff. The importance of this study is that it made it possible to receive feedback from all the parties involved in the absorption of PAs by EDs, in order to improve the process of their integration and training.

#### Designing a new role and setting boundaries

The findings indicate that the incorporation of the new role is well under way, that it is taking shape in satisfactory directions, and that most of the relevant parties regard it as potentially positive. PAs are preforming several clinical procedures and contributing to the ED workload. However, the degree of their integration into the ongoing work, and the authorizations they enjoy, vary by hospital.

#### Training for the PA role

Different, sometimes contradictory, references were made to the training of candidates for the PA role. The criticism revolved mainly around the content, depth and breadth of the course. Furthermore, ED managers claimed that they were not knowledgeable about the content of the MoH course and would like to be more involved. The Israeli model of PA training in its current form is reminiscent of that in Holland where PAs are integrated into ED work concomitantly with their training. If this format continues, ways should be found to encourage greater synergy between MoH and ED training. Changes were already made in advance of the second cohort, in both the MoH course and the ED segments. It is recommended that the MoH involve ED managers in determining the content of the MoH training course.

#### Satisfaction with the PA role and challenges

PAs feel that their work is important and that they do contribute to EDs. The main challenges that emerged during the year were the lack of advancement opportunities, a sense of limited authority, and difficulties with the nursing staff. Furthermore, the PAs' expectations of the new role declined drastically during the year of training, correlating with the decrease in satisfaction. An increase of PAs in the health system would undoubtedly have to take these challenges into account.

#### **Recommendations for policymakers**

We recommend that policymakers examine the definition of the PA role in depth and regulate the authorizations granted to the PAs, in order to maximize the potential of the new role and standardize it across hospitals.

We also recommend that consideration be given to integrating PAs into additional departments with workforce shortfalls, to ease the workload of the medical staff.

#### Study strengths and limitations

One of the study's strengths is the planning and coordination undertaken with the MoH prior to the start of training, and the cohort's follow-up in the first year of ED integration. Another strength is that we examined three different perspectives of PA integration – that of the PAs, the ED physicians and management.

The study can thus serve as a point of comparison with future research on the topic, and it will be interesting to continue to monitor this group of "pioneering" PAs in Israel.

Other important perspectives not examined in this study include that of the nursing staff and of ED

patients. Due to the difficulty of separating and isolating the PA contribution to ED performance from other ED interventions carried out in this period, its impact on ED performance measures was not examined. Similarly, since the period in question was that of preliminary training, no assessment was made of the clinical quality of the PA work. These limitations await future research.