

# רָפַאָה דְּחִיפָה בִּשְׂרָאֵל תִּפְקִידָן שֶׁל חֲלוֹפּוֹת בְּקָהִילָה לְחוֹדְרִי מִין בְּבָתִ-חוֹלִים

מִרְאֵם גַּרְנְטֶסְטֶּן מִרְאֵם טְרָחָן

עַכְשִׁיוֹת זוֹ אֲשֶׁר נִתְּנוּ לְעַכְשִׁיוֹת רָגְדָּה וְעַלְפִּיתָן לְעַכְשִׁיוֹת מִתְּרוֹנָה  
וְעַמְּשִׁעוֹרָה כְּפָתָח לְמִזְמְרָתָה עַמְּרָאָה זְלָגְזִינָּתָה מִלְּאָן בְּרוֹאָרָה

# **רפואה דחופה בישראל: תפקידן של חלופות בקחילה לחדרי מיען בבתי-חולם**

מרים גראנשטיין

מרק טרגין

עובדת זו נכתבת במסגרת תכנית מחקר מדיניות בריאות  
המשותפת לממשלה ישראל ולג'יונט-מכון ברוקדייל

ג'וינט-מכון ברוקדייל לגרונטולוגיה  
וחתפות אדים וחברה  
ת"ד 13087  
ירושלים 91130

טלפון : 02-6557400  
fax : 02-5612391



## פרסומים נוספים של מכון ברוקדייל העוסקים בנושא זה

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## תקציר

בעשור האחרון הוקמו בישראל מרכזים רבים לרפואה דחופה. הסיבה העיקרית להקמתם הייתה החגבות על הספקת הטיפול בנסיבות אחרות, כגון מרפאות קהילתיות (שעות ושירותים מוגבלים) וחדרי מיוון (נסיעת והמתנה ארוכות, ועלויות גבוהות). היעד העיקרי להקמתם של המרכזים לרפואה דחופה היה לספק נגישות משופרת ושירות מלא יותר שיהיה פחות יקר ויוטר מהיר בהשוואה לעבר.

חוק ביטוח הבריאות הממלכתי שהופעל ב-1995 קבע ש קופות-חולמים של ישראל אמורות לשמר על תקציב מסוון. כתוצאה, קופות-חולמים בודקות היום את המדיניות כלפי המרכזים לרפואה דחופה, התשתיות, שעות התפעול והתשומות. משרד הבריאות ביטה אף הוא עניין בסוגייה זו, בעיקר מסיבות של הבטחת איזוט, הרחבת בת-חולמים ותוכנונן מיטות.

לפני המחקר הנוכחי, לא היה מידע על מספרם של המרכזים לרפואה דחופה בישראל, ועל מידת השימוש בהם. יותר על כן, לא נעשה כל ניסיון להעריך האם הם חסכו נזקים מבחןת תועלת-עלות.

הדווח הנוכחי משתמש נתונים שנאספו בעיקר ממשרד הבריאות ו קופות-חולמים בארץ כדי לסקור את התפתחותם של המרכזים לרפואה דחופה בישראל ולתאר את השירותים הזמינים כולם. הדוח מספק גם אומדן של השימוש שנעשה במרכזיים לרפואה דחופה ושל חחישכו מבחןת עלויות השירותים הנידונים בהמשך.

הדווח הוא ראשון בסדרה של שני דוחות. הדוח השני יתאר את אוכלוסיית המטופלים המשמשים במרכזיים אלה, וכיום המטופלים בוחרים במרכזיים השונים. יתר על כן, הדוח יעריך את שיעוריהם של אותם מטופלים שאילו לא המרכזים היו זמינים, היו פונים לחדרי המיוון.

כל קופת-חולמים פיתחה שיטה משלה להספקת שירותים לרפואה דחופה. רוב השירותים מסופקים לאחר שהמרפאות הרגילות נסגרות, אם כי בדרך כלל לא לאחר חצotta הלילה. בדרך כלל השירותים מסופקים על-ידי גורמים חיצוניים או במרפאות הקהילתיות של קופות-חולמים עצמן. מכלול השירותים (למשל, רדיולוגיה, מעבדה ובית מರחת) משתנה מ קופת-חולמים אחד לאחרת. המטופל נושא בדרך כלל בתשלומים כספי חלק על הביקור.

ב-1994 היו קרוב ל-600,000 ביקורים במרכזיים לרפואה דחופה, שהם 10% בиковרים אלף. לשט השוואה: ב-1994 היו 1,895,000 ביקורים בחו"ל מיוון (351 אלף). מכאן שהיחס הנוכחי של בиковרים במרכזיים לרפואה דחופה, לעומת זאת מיוון, הוא כ-1:3.

מאז הקמתה של מערכת המרכזים לרפואה דחופה ועד 1992, הייתה ירידה עקבית בשימוש בחדרי מיוון. לروع המזל אין במצבו נתונים ארכיטים על הביקורים במרכזיים לרפואה דחופה במשך שנים ראשונות אלה, ולכן איןנו יכולים לקבוע האם ירידה זו הקבילה לעלייה בשימוש במרכזיים לרפואה דחופה. בירושלים, בה נתונים אלה זמינים, נראה שהעלייה בשימוש במרכזיים לרפואה דחופה הייתה אכן קשורה לירידה בביקורים בחו"ל מיוון.

מנקודת מבטן של קופות- החוליםים נקבע החיסכון בעליות שנובע מהפעלתם של המרכזים לרופאה דחופה על פי ההוצאות התפעוליות וההוצאות של המרכזים לרופאה דחופה, ולפי הכספיים שנחסכו בעקבות הימנעות מביקורים בחדרי מיוון. ערכנו ניתוח לעומק של החיסכון בעליות של קופת- החוליםים כללית בירושלים כתוצאה מהפעלתם של המרכזים לרופאה דחופה בחודש Mai 1995. במהלך חודש זה, הגיעו הוצאות התפעול הכלולות לכ-200,000 ש"ח, בעוד שההוצאות מ-2,500,000 ביקורי המטופלים הסתכמו ב-125,000 ש"ח, כך שהגironו נטו הסתכם בכ-80,000 ש"ח. מכיוון שאין במצב נטוני על מספר הביקורים בחדרי המיוון שנמנעו במהלך תקופה, ערכנו ניתוח רגישות. לדוגמה, אם 25% (625) מאותם 2,500 ביקורי המטופלים במר"ם (מרכז רפואי מיידית) היו מוצבעים בחדרי מיוון, הדבר היה עולה לkopft-החולים 200,000 ש"ח (נחתםך על עלות לביקור של 320 ש"ח). מכאן, שלמרות גירעון תפעולי של כ-80,000 ש"ח, החיסכון נטו של קופת-החולים עדין הגיע לכ-120,000 ש"ח. לאחר מכן חישבנו את "נקודות האיזון". אם 10% (250) מאותם ביקורי מטופלים היו מתורשים בחדר מיוון, הכספי ששיה נחסך על-ידי אי-הביקורת בחדר המיוון תהיה משתווה לגירעון התפעולי של כ-80,000 ש"ח.

ניתוח זומה נערך לגבי כלל המערכת של מרכזי לרופאה דחופה של קופת- החוליםים כללית לשנת 1995. מביי להביא בחשבון את הביקורים בחדרי מיוון שנמנעו, עולה המערכת לקופת-החולים כללית 12-8 מיליון ש"ח. אם 25% מביקורי המטופלים היו מתורשים בחדרי המיוון (באומדן זהיר), אזי הפעלה של המערכת תיתן חיסכון וטיורטי לקופת-חולים כללית של 8 עד 12 מיליון ש"ח. כמו כן, לא כל המרכזים של קופת-חולים כללית הם חסכניים במידה שווה, ונקודות האיזון משתנות מ-10% עד 40% כאשר הנורמה היא 10%-15%. מסקר המטופלים, המתואר בפירוט בדוח השני, עולה כי אם המרכזים לרופאה דחופה לא היו זמינים כלל, פחות מ-20% מהמטופלים היו מוכנים לחכות עד הבוקר, כאשר יותר מ-80% אמרו שהם היו מתחשים טיפול רפואי במקום אחר באותו לילה (קרוב לוודאי בחדר מיוון בבית-החולים). לדברי הרופאים המטופלים, כמעט ממחצית מהמטופלים סבלו מבעיות רפואיות שלא סבלו דיוחי עד הבוקר.

לאחר מכן הערכנו את החיסכון בעליות לפי מגוון הנחות לגבי כלל קופות-החולים. לדוגמה, אם העלות המומוצעת לקופת-החולים של ביקור במרכזי לרופאה דחופה ב-1995 הייתה 60 ש"ח, ו-30% מביקורים אלה מנעו את השימוש בחדרי מיוון (ב-320 ש"ח לביקור), כי אז המרכזים חסכו לקופות-החולים 21 מיליון ש"ח. ברור גם שאפילו אם רק 20% מהמשתמשים במרכזי לרופאה דחופה היו פונים לחדר מיוון בהיעדר האופציה של מרכזי לרופאה דחופה, ועלויות התפעול היו יותר מאשר 60 ש"ח לביקור - המרכזים היו מפסידים כספ. עם זאת, המרכז לטיפול רפואי לרופאה דחופה הוא קרוב לוודאי חטconi כאשר מתחשבים בחיסכון הנגרם כתוצאה מהימנעות מביקורים בחדרי מיוון.

השאלה האם המערכת של מרכזי לרופאה דחופה חטconi מנקודות מבט כלל-מערכתית ברורה פתוחה. ניתוח של הסוגייה יצטרך להביא בחשבון עלויות קבועות של בית-החולים וכוח האדם, כמו גם צורכי בנייה/הרחבה לטווח הארץ.

כמה מה מרכזיים לרופאה דחופה עולים יותר מאחרים. ניתן להפוך מרכזי מסוימים לחטconiים יותר מבחןת העליות באמצעות עידוד שימוש ייעיל והולם יותר. בהתאם למידת שימושן של החלופות השונות, ניתן שיש הצדקה לסגירותם של מספר מרכזיים לרופאה דחופה מסיבות פיננסיות. עם זאת,

**יתכן ש קופות- החוליםים ירצו בכל זאת לשמור על מרכזים אלה מסיבות של שיווק והספקת שירותים בריאות נחוצים.**

קופות- החוליםים בישראל צריכים להגדיר את האסטרטגיות שלחן לגבי המרכזים לרפואה דחופה. ביום, האסטרטגיות של המרכזים לרפואה דחופה משתנות במידה רבה. מבנהו של המרכז, כוח האדם שבו, ודרך תפקודו, יכולים להשנותו. מרכזו למרכז, וכן כך קורה על פני קשת רחבה של אפשרויות, החל במרפאה גרידא ועד למרצ'ה שהוא חדר מין לכל דבר. כדי להוסיף ולסבך את הסוגייה, עשוות מטרותיו של מרכז לרפואה דחופה להשתנות במהלךו של יומם אחד בלבד. לדוגמה, כאשר קיימת החלופה של מרפאה, יתכן שמתאים יותר להציג רק רפואה דחופה ולא רפואה שגרתית. בנוסף לפועלותיו האישיות של המטופל, המבוססות על תפיסתו העצמית את צרכיו, נקבע השימוש במרכז לרפואה דחופה. גם על-ידי תהליכי המין והשינויים שיחולו בהן בהתאם לתנאים רפואיים, ישפו על השימוש במרקזים לרפואה דחופה. יתר על כן, קופת- החוליםים עשויה לחת על עצמה תפקיד פעיל יותר במינום של המבוטחים (למשל, מין באמצעות הטלפון). האסטרטגיה הכלכלת של קופת- החוליםים תשפיע על הכמות והיעילות, וכן גם על יכולת הקיום הכלכלית של המרכזים.

המחקר שלנו מתקשר לתוכנית ארוך הטווח של משרד הבריאות, מכיוון שאמם המרכזים לרפואה דחופה מצמצמים את כמות הביקורים בחזרי מין, **ייתכן שהייה צורך בפחות מיטות ומתוקני אשפוז**. אנו יודעים מהסתירות גם שכ- 50% מכל הביקורים בחזרי המין (1,000,000) אינם מוצדקים, ושהטיפול הנitin במרקזים לרפואה דחופה יכול להספיק. אם נוכל למין חולמים אלה ולהעבירם למרקזים לרפואה דחופה בהנחה של שליש מכל המקרים המטופלים במרקזים לרפואה דחופה אכן דורשים רפואיים לרפואה דחופה, כי אז שיעור הניצול האידיאלי של המרכזים לרפואה דחופה יהיה 3,000,000, או, פי תמיisha מהמספר הנוכחי.

מסקנתנו היא **шибוטני הרפואה הדחופה מנוצלים באורח נרחב, ולעתים קרובות הם אכן חסכוניים**. שימוש מוגבר ויעיל יותר בשירותי הרפואה הדחופה עשוי להפחית עוד יותר את הצורך בשירותי חדרי המין. יש צורך בפועל שוטפת כדי להעיריך, ואולי לשנות, את אוכלוסיית המטופלים המשמשת במרקזים אלה. הצעד הראשון בהערכתה שכזו יהיה הבנה טובת יותר של האוכלוסייה המשמשת בשירותים אלה וכייזד היא בוחרת מבין האלטרנטיבות. לבסוף, יש צורך בהערכתה ובhashowaha של איכوت הטיפול המסופק במרקזים אלה.

## תודות

ברצוננו לנצל הזדמנות זו כדי להביע את הוקרתנו לנלו שביט זיל, שנפטר במהלך השלבים הראשונים של המהקר. השנים הרבות שהקדיש לאיסוף נתונים רלוונטיים הן רבות ערך ביותר.

ברצוננו להודות לעמיטינו בגיינט-מכון ברוקדייל שתמכו וייעצו במהלך עבודתה זו. תודה מיוחדת לברוך רוזן על העורתיו על טיוותות מוקדמות של דוח זה.

אנו מודים לחז' אפלבאום ולמייכאל דור שחלקו עמו את ניסיונים ואת תובנותם לגבי הקמתה של המערכת של מרכז רפואי הדתופה. אנו מודים גם ליאב אהרוןסון, טל אביזן, עדיה בן-שושן, נורית פרידמן, אברהם מידן ורוברטה רוזנפלד, על עזרתם בהשגת הנתונים לנימוח שכלל בעבודה זו. תודות נוספת לבועז פורתר, מיכאל רוזנבלוט ומיכאל ויינר על העורתיות המועילות וסייעם. לבסוף, תודה ללاري ריפקין, שערך את הדוח ולאילנה שיזג שהדפסה אותו.

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A number of issues bear clarification. The percentage of patients who should or would go to the ER if no UCC were available remains unclear (this issue is dealt with in our second report), as does the percentage of ER patients who should or could be directed to a UCC. As mentioned above, strategies to make these sites more efficient need to be tested. Finally, the alternatives, including home visits, need to be evaluated for quality.

One can predict a number of changes for the near future. For example, the use of home visits is likely to increase. In addition, hospitals may choose to create their own on-site UCCs (Anderson, 1986). Also, fixed ER pricing will probably require modification. In addition, if UCCs deal with healthier patients, ERs will have a "sicker" patient population and thus require more compensation. On the other hand, hospitals would most likely care for sicker patients via admission in order to avoid major expenses in the ER. Thus, a close evaluation of the ER population, the services provided and the frequency of hospitalization is warranted. Further, sick funds may consider pooling resources or sub-contracting to one provider, either in areas with poor break-even points or merely for efficiency (economy of scale).

## **7. Conclusions**

We conclude that urgent care services are being extensively utilized and are often cost-effective. Increased and more efficient use of urgent care services may further decrease the need for ER services. Ongoing work is needed to evaluate, and perhaps modify, the patient population that is using these facilities. The first step in such an evaluation should be a better understanding of the population that uses these services and how it chooses among the alternatives. Finally, there is a need to evaluate and compare the quality of care provided at these sites.

The effect of reducing ER visits is not readily obvious. Overall, ER visits have been rising. In 1994 approximately 1.9 million people went to the ER. If 10-25% of the approximately 600,000 UCC users would otherwise have gone to the ER, then approximately 59,000-150,000 additional ER visits (3-7%) were avoided. The inability to accurately predict ER visits makes the aforementioned approximation difficult to prove. Yet, the medical severity of the population that visited the UCCs and the analysis of patient decision making, strongly suggest that many of these patients would otherwise have gone to an ER.

A more complete analysis of cost-effectiveness should also take into account other efficiency factors. For example, a UCC's utilization rate will vary during certain hours (e.g., 24:00-07:00) or because of its geographic location. Thus, the Ministry of Health (or perhaps the sick funds) must decide whether such services are needed in low utilization areas such as the periphery, where the relatively sparse population creates higher break-even points.

A site can be made more cost-effective by encouraging and fostering more efficient and appropriate use. For example, increasing the volume of users can lower a site's break-even point. Similarly, targeting users who would otherwise go to an ER would also improve the break-even point. It is difficult to predict the impact of some decisions. For example, increasing the co-payment might increase collections and the percentage of patients who would otherwise go to the ER. Alternatively, an increase in co-payment, especially if the treatment is not covered at all, might discourage UCC use and encourage "free" ER use. Ideally, co-payment should vary with the appropriateness of the visit. In general, alternatives such as out-sourcing, revised service levels and modified fee structures require evaluation.

Our results might affect long-term planning by the Ministry of Health, for if UCCs reduce ER visits, there may be a need for fewer hospital beds and facilities. It is possible to estimate the "ideal" UCC utilization rate. We know that approximately 50% of all ER visits (1,000,000) are inappropriate, and that UCC treatment would be sufficient. If we could triage these patients to UCCs with the expectation that, as today, one-third of all UCC visits actually require urgent care, a reasonable "goal" would be 3,000,000 visits, or five times the present number. Therefore, the cost-effectiveness of UCCs should also include savings incurred from the avoidance of unnecessary hospital expansion.

Some UCCs are probably not cost-effective. As our analysis shows, the break-even point varies greatly for different UCCs. Some of the strategies discussed above could make a site more cost-effective. Depending on what alternatives are feasible, closing some UCCs for financial reasons may be warranted. However, the sick funds may desire to maintain such sites for a number of reasons, including marketing and the provision of needed health care services.

### *Clinic or ER Alternative?*

Ideally, the most effective use of the acute care system would accurately triage patients into ERs, UCCs or next-day clinic visits. Realistically, though, no triage system can be 100% accurate, and one could expect errors on the conservative side to result in patients being sent to an over-equipped site (UCC or ER) in order to avoid sending them to an under-equipped site (clinic or UCC). Under the current system approximately 50-60% of ER visits are unnecessary,<sup>6</sup> while 5-10% of UCC visits require an ER.<sup>7</sup> The cost implications are obvious, though the effect on quality of care is unknown. In one prospective study 20% of the patients were triaged from the ER to a clinic, with no demonstrable degradation in quality of care; an additional 20-40% had minor trauma that could have been dealt with by a UCC (Dale et al., 1995). The impact of urgent care center visits on clinic visits is more difficult to measure, the percentage of visits that could take place in clinics being unknown. Even if one assumes that 75% of UCC patients could have used a clinic, 450,000 visits are just 0.5-1% of the estimated number of clinic visits a year.

### *Cost-effectiveness*

We estimated the cost-effectiveness of urgent care centers for the sick funds in three settings: Maram/Jerusalem, Maram/Israel, and all UCCs/Israel. Without taking into account the savings from avoided ER visits, the Maram in Jerusalem may be losing as much as NIS 1 million a year. However, if one-third of its patients would otherwise go to the ER, then in fact it is saving the sick fund NIS 2.4 million a year. Similarly, while the entire Maram system may appear to be losing NIS 8-12 million annually, it may instead be saving KHC NIS 8-12 million a year. Finally, the application of a sensitivity analysis to national utilization figures yields a conservative estimated savings of NIS 21 million.

These estimates reflect benefits for the sick funds. A patient's perspective may be very different. Both UCCs and ERs can include a co-payment. Thus, a pure financial decision will be governed by how much the patient has to pay. In reality other factors, such as convenience and waiting time, play a role as well. Thus, what benefits the sick fund may not benefit the patient.

Whether the UCC system is cost-effective for the government is unclear. Analysis of the issue would need to deal with fixed hospital and personnel costs as well as long-term building/expansion needs.

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6 Applying literature to Israel

7 Based on Maram and Terem data

To further complicate matters, the goals of a UCC may vary during the course of a single day. For example, when a clinic alternative is available, it may be appropriate that only urgent care, and not routine care, be dealt with, whereas the quality and availability of the surrounding alternatives (e.g., Terem, Sharal and ERs) can affect the demand for services. Also, for financial reasons the services available after midnight (e.g., pharmacy and radiology) may need to be scaled back. All of these factors can influence the sick fund's triage/reimbursement process as well as the patient's personal actions based on self-perception of his or her needs.

Another option for urgent care is house calls. In most countries house calls are infrequently used. In part, this reflects the increased reliance on technology and the fact that primary care physicians are spending less time on call (Hallam, 1994). In fact, in the UK only 3-6% of patients attempt to contact their primary care physician first. In Israel, which now requires sick funds to provide 24-hour services, house calls are already on the rise. Private companies having contractual arrangements with the sick funds to provide doctors for house calls have appeared all over the country. Undoubtedly, both patients and physicians would benefit from education on how to best utilize this service. Further, the Ministry of Health will need to devise new methods to evaluate its expansion.

Israel's sick funds must define their UCC strategies. For example, the provision of care increases with easier access and higher demand (Bollam et al., 1988). One study demonstrated that adding co-payments reduced emergency visits, primarily among those patients whose needs were less urgent (Selby et al., 1996). Thus, sick fund decisions on co-payment levels and how they might vary according to medical condition will affect UCC utilization. Further, a fund can take a more active role in triaging insurees. For example, it can create and enforce rules, or enable facilitators/screeners to handle acute problems (either by phone or on-site). Each decision will impact the others, as the overall strategy will affect volume and efficiency, and therefore the economic viability of the sites.

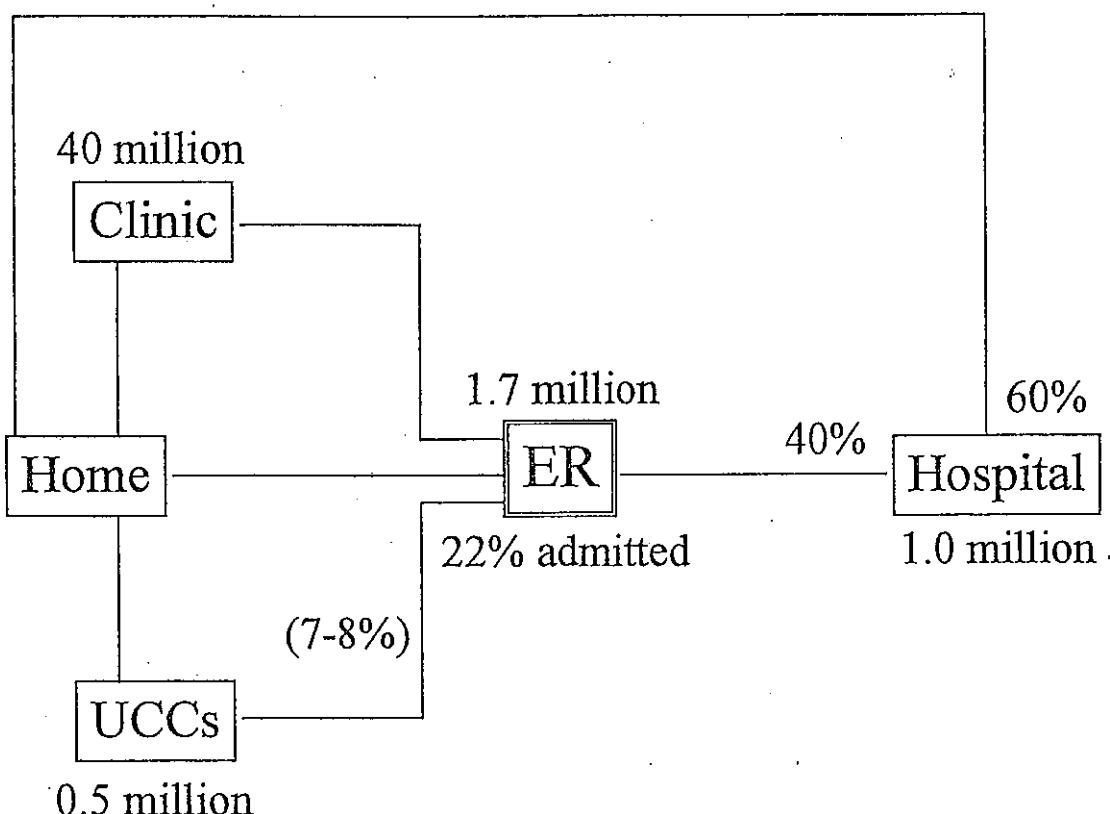
Any strategy will benefit from patient education. Currently, UCC utilization is determined by the patient's judgement (or the judgement of those responsible for the patient) as to the urgency of the problem and the need for intervention (e.g., x-ray), his perceptions about access, speed and efficiency of service, and financial reimbursement (Rosen et al., 1993; Singh, 1988; Baraff et al., 1992; Richardson et al., 1992). If the sick fund wishes to promote a certain pattern of use, as mentioned above, the patient needs to know when the UCC is an appropriate option. In addition, the patient must be educated as to what problems are best suited for which delivery site.

## 6. Discussion

In Israel, as in the rest of the world, there has been a steady increase in the provision of urgent care services in non-ER settings. In 1995, the utilization of urgent care centers was approximately 100 per thousand population, approximately one-third of ER use.

One can estimate the utilization of other medical services in Israel by combining additional sources of information with our study results (Figure 3). In 1990, 1.6 million Israelis visited the ER, and 22% were subsequently admitted for hospitalization (Rosen et al., 1993). In addition, there were approximately 40 million primary care physician visits.

Figure 3: Annual Utilization Estimates for Israeli Medical Care



The ideal role for urgent care centers is unclear. Theoretically, a center can satisfy the need for both urgent and after-hours care. However, whether after-hours care should include all routine clinic visits is unclear. Thus, the role spectrum for a UCC runs from walk-in clinic for episodic care to facility which fills the void between clinic and ER. As a result, a center's structure, staffing and function can and do vary across the spectrum from clinic to ER equivalent. Hence, before defining an "appropriate" population for an urgent care center to serve, one must first define the role the center is to play.

Table 9: Hypothetical Sick Fund Net Income<sup>1</sup> from Urgent Care Center Operation in 1995 - A Sensitivity Analysis

UCC visit cost (NIS)	ER Percentage <sup>2</sup>							
	0%	10%	20%	30%	40%	50%	60%	70%
160	(94,433)	(75,547)	(56,660)	(37,773)	(18,887)	0	18,887	37,773
140	(82,629)	(63,743)	(44,856)	(25,969)	(7,083)	11,804	30,691	49,578
120	(70,825)	(51,938)	(33,052)	(14,165)	4,722	23,608	42,495	61,382
100	(59,021)	(40,134)	(21,248)	(2,361)	16,526	35,413	54,299	73,186
80	(47,217)	(28,330)	(9,443)	9,443	28,330	47,217	66,103	84,990
60	(35,413)	(16,526)	2,361	21,248	40,134	59,021	77,908	96,794
40	(23,608)	(4,722)	14,165	33,052	51,938	70,825	89,712	108,598

Total 1995 UCC visits - 590,209

1995 ER visit cost - NIS 320

1 Hypothetical sick fund net income = (total UCC visits x UCC visit cost) - (total UCC visits x ER percentage x ER visit cost)

2 Hypothetical percentage of UCC visits which would have taken place in an ER

The calculation for the "break-even point" is:

$$(expenses - collections)$$

$$\text{Break-even Point} = \frac{\text{(expenses - collections)}}{\text{(number of UCC patients x cost of ER visit)}}$$

Accordingly, for the Maram facility to break even in May, 1995, 10% (250) of its patient visits would otherwise have had to have taken place in the emergency room (see Table 8).

A similar analysis was performed for the entire Maram system for 1995, including and excluding pharmacist costs.<sup>4</sup> If included, the system cost KHC approximately NIS 12 million; if not, it cost NIS 8 million. If we consider the money saved by KHC by avoiding ER visits, the break-even points for the two scenarios are 15% and 10% respectively. If 25% of the patient visits had otherwise taken place in ERs that year (a conservative estimate), the system's operation provided a theoretical net savings to KHC of between NIS 8 and 12 million. Of course, not all Maram facilities are equally cost-effective, and break-even points vary from 10-40%, it being 20% at most sites.<sup>5</sup>

We then estimated cost-effectiveness under a variety of assumptions for the sick funds operating UCCs (Table 9). The x-axis reflects the percentage of patients who would have gone to the ER if the UCC was closed. The y-axis represents the average cost of a visit to these centers. For example, if the average 1995 cost to a sick fund for a UCC visit was NIS 60, and 30% of these visits avoided ER use (at NIS 320 per visit), the centers saved the sick funds NIS 21 million. It is also clear that if only 20% of UCC users had gone to the ER, and operating costs had been more than NIS 60 per visit, the centers would have lost money.

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- 4 The pharmacy is located in the community clinic with the Maram. It is not clear whether any decision made regarding the opening or closing of the Maram would also apply to the pharmacy. Thus, it is unclear whether to include the expenses of operating the pharmacy as part of the expenses of operating the Maram.
  - 5 A key issue in our second report is where a patient would go if no UCC is available. Our patient survey revealed that 19% of the patients were willing to wait until morning, and that 49% said that if no UCC was available they would have gone the same night to an ER. According to the physicians who treated these patients, more than half had medical problems that could not wait until morning.

**Table 7: Expenses and Revenues of the Jerusalem Maram (May, 1995; 2,500 patient visits)**

	NIS
Administration	20,795
Physicians	73,500
Pharmacists	21,326
X-ray techs	12,057
Nurses	38,191
Lab techs	10,610
Housekeeping	8,416
Cleaning	1,575
<b>Personnel sub-total</b>	<b>186,470</b>
Building depreciation	10,000
Municipal taxes	581
Electricity	213
Water	132
Phone/fax	257
Medical supplies	3,000
Taxi	3,500
<b>Non-personnel subtotal</b>	<b>17,683</b>
<b>Total expenses<sup>1</sup></b>	<b>204,153 NIS</b>
<b>Total collections</b>	<b>125,000 NIS</b>
<b>Net</b>	<b>-79,153 NIS</b>

<sup>1</sup> Analysis performed by Ayelet Berg, JDC-Brookdale Institute

**Table 8: Potential Savings from Avoided ER Visits, Jerusalem Maram (May, 1995)**

ER visits avoided <sup>1</sup>	Sick fund savings <sup>2</sup>	Net cost/gain to sick fund	Net cost/gain per Maram visit
0%	0 NIS	(79,153 NIS)	(32 NIS)
10%	80,000 NIS	847 NIS	0 NIS
25%	200,000 NIS	120,847 NIS	48 NIS
35%	280,000 NIS	200,847 NIS	80 NIS
50%	400,000 NIS	320,847 NIS	128 NIS

<sup>1</sup> Based on 2,500 patients

<sup>2</sup> Assumes sick fund saves NIS 320 per avoided ER visit

In addition, there are factors which are primarily non-economic. They include the effect which centers have on patterns of health care in such realms as preventive medicine, the patient-physician relationship, staff attitudes and job satisfaction, and quality of care levels at the centers as compared to those at emergency rooms or daytime community clinics.

The answer is likely to be different for individual centers in different geographical locations. Further, it would vary with changes in the health care system's reimbursement arrangements (e.g., global ER fees<sup>3</sup>). In addition, the cost-effectiveness of a site must be compared to alternatives (e.g., physician house calls). Importantly, the answers may vary if looked at from the perspective of the patient (who may be free to go to an ER) or national policy (e.g., the need to expand ER facilities).

We performed an in-depth analysis of the Jerusalem Maram for May, 1995 (see Table 7). In that month, overall operating expenses totalled NIS 204,153 while collections from the 2,500 patient visits yielded NIS 125,000, for a net loss of NIS 79,153. Table 8 shows what emergency room visits would have cost KHC had the Maram facility not been in operation that month. For example, had 25% (625) of those 2,500 Maram patient visits instead taken place in emergency rooms, it would have cost the sick fund NIS 200,000 (based on a per visit cost of NIS 320). While the money saved by operating the Maram facility that month would have been offset by the operating loss of NIS 79,153, the net savings would still be almost NIS 121,000.

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3 With implementation of the National Health Insurance Law on January 1, 1995, all emergency rooms have received a set fee (global) for every visit, regardless of the complexity and cost of the care provided.

Figure 2: Relationship between Urgent Care Center and ER Utilization in Jerusalem

### Utilization per thousand population

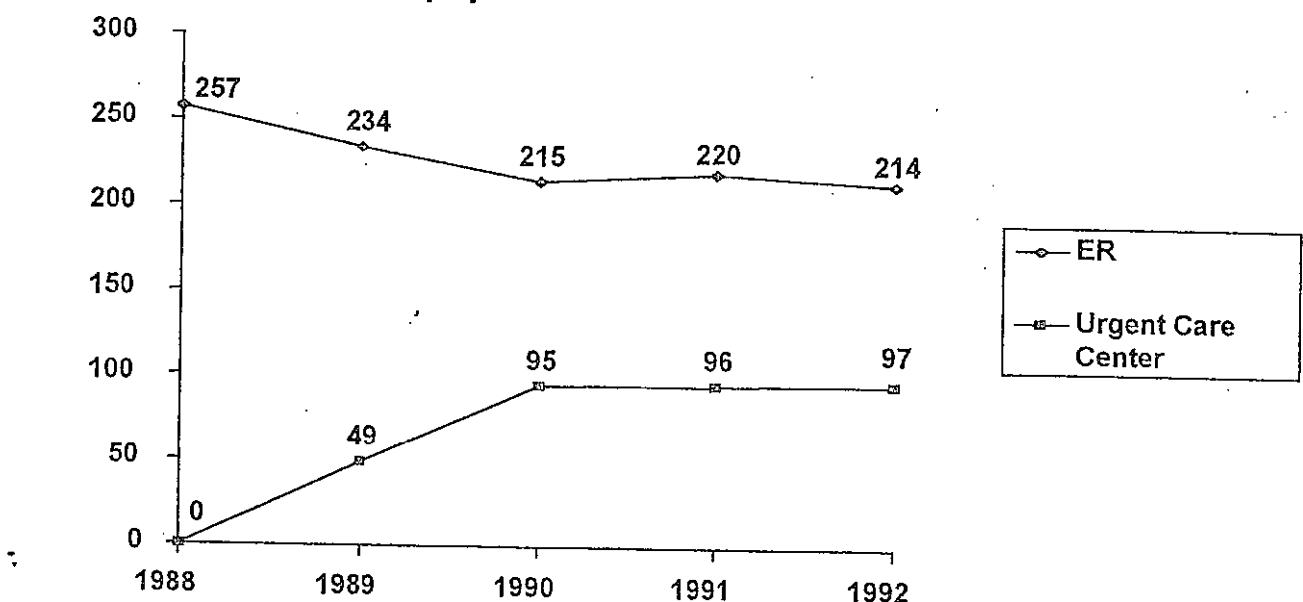


Table 6: National Utilization of Urgent Care Centers and Emergency Rooms (1988, 1989, 1993, 1994)

	1988	1989	1993	1994
UCC (raw, in thousands)	0	0	505	568
(per thousand population)	0	0	96	105
ER (raw, in thousands)	1,571	1,563	1,767	1,895
(per thousand population)	354	346	336	351

### *Cost-effectiveness of Urgent Care Centers*

An important question for sick funds is whether urgent care centers are cost-effective. There are a number of factors that play a role in cost-effectiveness:

- The cost of operating a UCC (expenses-collections)
- The money saved by avoiding ER visits
- The money saved by avoiding hospitalization
- The money saved by obviating the need for after-hours care in regular clinics
- A center's value from a marketing perspective (i.e., impact on market share).

## 5. National Utilization of Urgent Care Centers

Data from the aforementioned facilities were combined in order to estimate national utilization of urgent care centers (Table 5). In 1994 there were close to 600,000 visits to these facilities, representing a rate of 109 visits per thousand population. For comparative purposes, in 1994 there were 1,895,000 ER visits (351 per thousand). Thus, the current ratio of ER to UCC visits is approximately 3:1.

**Table 5: National Utilization of Urgent Care Centers (1993, 1994)**

	1993	1994
KHC <sup>1</sup>	231,432	270,637
Maccabi <sup>1</sup>	36,916	54,303
Terem	39,195	45,493
Sharal (MDA) <sup>1,2</sup>	191,304	191,304 <sup>3</sup>
Leumit	6,000 <sup>4</sup>	6,000 <sup>4</sup>
<b>Total</b>	<b>504,847</b>	<b>567,737</b>
Population	5,261,400	5,399,300
<b>Total per 1,000</b>	<b>96</b>	<b>105</b>

<sup>1</sup> Does not include visits to Terem

<sup>2</sup> Does not include house calls

<sup>3</sup> Assume same in 1994

<sup>4</sup> Management estimate

### *Trends in Urgent Care Center Visits and ER Utilization*

Figure 2 displays the relationship between the utilization rates of UCCs and ERs in Jerusalem. It appears that the increased use of these urgent care centers was associated with a decrease in ER visits; since 1990 these rates have plateaued.

We have described the relationship between the national utilization rates of urgent care centers and emergency rooms (Table 6). As was shown in Figure 1, there was a steady decline in ER utilization until 1992, followed by an upsurge. Unfortunately, we do not have national figures for UCC visits during those critical years, and thus cannot generate a meaningful figure to represent this association.

### *Unidentified Urgent Care Centers*

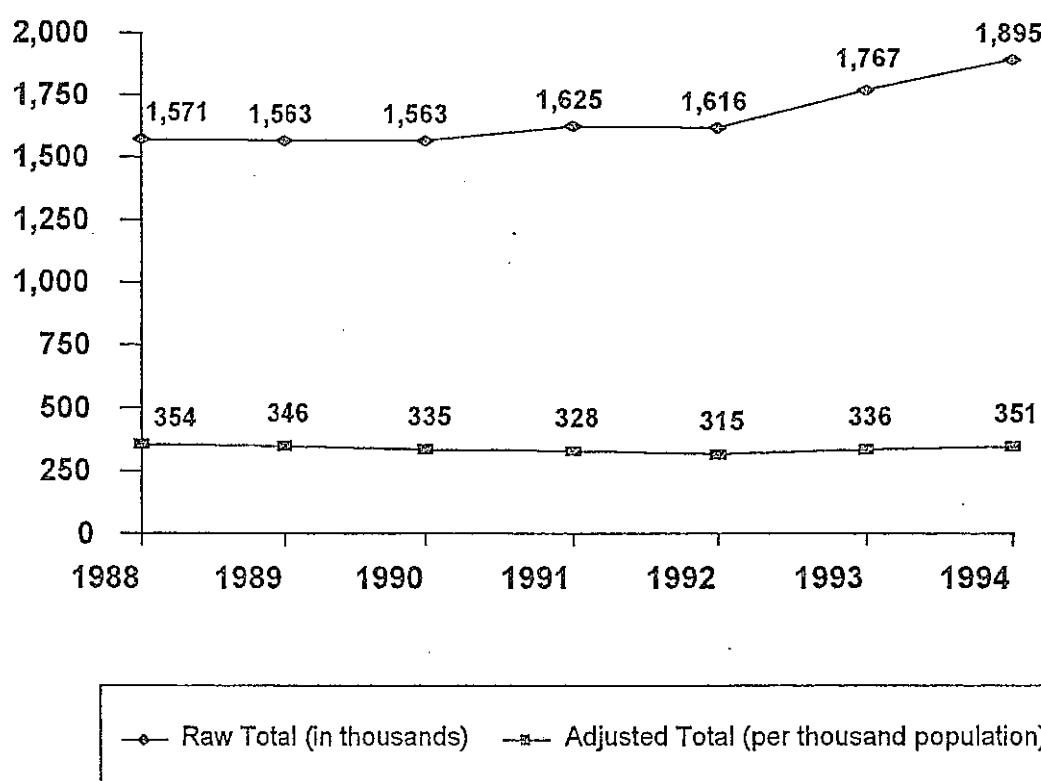
There are undoubtedly additional sites in Israel that are functioning as urgent care centers, either operated by private companies or groups of doctors. We have not included these facilities in our study.

### *Emergency Rooms*

The traditional site for urgent care is the ER. It is unclear what percentage of ER visits are for non-emergencies, though estimates in the literature place this figure in the 70% range. Figure 1 describes the overall ER utilization rates in Israel, as well as the rates according to population. The number of annual ER visits rose by 21% between 1988 and 1994, from 1,571,006 to 1,894,664. However, there was no increase after adjustments for population growth.

Figure 1: ER Visits Nationwide (1988-1994)

#### **ER Visits**



**Table 4: MDA Utilization**

Location	On-site Visits	House Calls	Total
Bet Shean	3,612	937	4,549
Tiberias	4,960	1,844	6,804
Hatzor	2,885	326	3,211
Nazareth Illit	2,102	1,669	3,771
Acre	3,550	1,567	5,117
Karmiel	2,299	1,014	3,313
Nahariya	1,612	788	2,400
Migdal Ha'emek	1,640	1,126	2,766
Yokne'am	1,465	159	1,624
Jerusalem	39,178	3,000	42,178
Kiryat Arba	716	133	849
Bet Shemesh	7,138	0	7,138
Tel Aviv	3,000	7,946	10,946
Ramat Gan	6,886	4,850	11,736
Holon	4,184	3,997	8,181
Bat Yam	7,592	3,860	11,452
Haifa	2,974	4,468	7,442
Kiry'ot	6,060	2,483	8,543
Kiryat Tivon	1,746	406	2,152
Zichron Ya'acov	0	336	336
Kiryat Ata	3,491	1,756	5,247
Beersheba	1,526	1,197	2,723
Netivot	2,603	583	3,186
Dimona	1,386	1,812	3,198
Yeroham	650	308	958
Ofakim	2,430	797	3,227
Arad	2,640	770	3,410
Mitzpe Ramon	465	314	779
Rahat	1,003	0	1,003
Petah Tikva	11,940	1,750	13,690
Kfar Saba	7,600	1,085	8,685
Rishon Lezion	7,960	2,020	9,980
Ramla/Lod	12,980	1,100	14,080
Ashdod	5,726	3,336	9,062
Sderot	505	323	828
Kiryat Gat	2,563	1,117	3,680
Kiryat Malachi	1,568	670	2,238
<b>Total</b>	<b>170,635</b>	<b>59,847</b>	<b>230,482</b>

In 1990 another Terem branch was established in Tel Aviv (though in 1994 it became independent of the facility in Jerusalem). In January, 1993, an additional branch was opened in Ma'ale Adumim, outside Jerusalem. This site is open only in the evening, when the sick fund clinics are closed.

### ***Magen David Adom (MDA)***

The MDA system exists primarily to organize and provide ambulance care. In addition, the Ministry of Health rents space from the MDA, primarily to provide care in areas where other urgent care alternatives are not available. These sites allow patient visits as well as arrangements for house calls. There are currently 43 MDA stations throughout the country, 38 of which provide physician services from 1900 to 0700 the next day.<sup>2</sup> In 1994, patients paid these physicians NIS 44 for a site visit and NIS 88 for a house call. To insure physician availability, the Ministry of Health guarantees a minimum payment per physician per shift. The Ministry receives no percentages from physician fees. The MDA facilities are typically manned by one physician. There are no pharmacy, radiology or laboratory services. Table 4 describes the number of visits for each facility in 1993 (including the visits to Terem in Jerusalem). Overall there were more than 230,000 visits country-wide, of which 60,000 were house calls.

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2 This is called Sharal, the acronym for *sherutei layla* (night service).

### ***Leumit***

The Leumit sick fund insures approximately 9% of Israel's population. It began establishing its own urgent care centers approximately four years ago. In 1995 these facilities recorded approximately 6,000 visits.

The payment scheme has been consistent, the insuree paying NIS 40 per visit (NIS 60 for a house call), with an additional NIS 40 being paid by the sick fund.

### ***Terem***

Terem is a privately owned corporation which provides services to all sick funds, as well as to private pay parties. It was started in Jerusalem in 1988. Operating out of the local MDA site, where it rents space, it has been open 24 hours a day since August, 1993.

Terem typically collects a set fee from sick fund members and a supplemental fee from the sick fund. These fees are usually waived if the patient requires an ER referral. The supplemental fee originally varied according to the services provided (e.g., lab, x-ray and medication), though for the past several years it has been fixed. There is a separate fee schedule if an orthopedist is required. In 1988 Terem charged a minimum fee of NIS 27 per visit. Today that fee has risen to about NIS 40 for the patient and NIS 100 for the sick fund (including V.A.T.), the exact fees varying according to the formal agreement with each sick fund.

Terem offers on-site radiology and laboratory facilities. Intravenous fluids and medications are also available. The physician staff usually consists of one to two doctors, usually with training or specialization in Family Medicine, Internal Medicine, Pediatrics or Emergency Care. The physician is paid a fixed per-hour salary. Table 3 describes the total number of visits to Terem in 1990-1995, with a breakdown by patient sick fund membership. Currently, Terem registers approximately 50,000 visits per year, with great variation in sick fund utilization.

**Table 3: Terem Utilization**

	1990	1991	1992	1993	1994	1995
Total	23,688	26,251	29,515	39,196	45,493	50,327
KHC	10,237	9,030	2,833	4,344	4,486	4,288
Maccabi	2,828	4,011	4,115	6,675	7,195	8,727
Meuhedet	6,522	7,035	11,040	17,899	19,679	21,437
Leumit	2,304	2,711	2,515	4,086	4,010	4,665
Other	1,797	3,464	9,012	6,192	10,123	11,210

The physician staff usually consists of one or two doctors, typically with training or specialization in Pediatrics or Family Medicine. The physicians are paid per hour or supplied by a hospital via a special manpower arrangement.

The non-physician staff varies with the services provided; as with Maram, not all Moked sites have a pharmacist, x-ray or lab technician. Non-physician staff members are paid on an hourly basis at overtime rates. The exact number of these staffers will vary by site and is influenced by local work loads and financial options/constraints.

In 1989 the Moked facilities charged patients NIS 40 per visit. Today they charge NIS 40 for children under six years old, and NIS 55 for children six or over and adults; the fees include physician exam, labs and x-rays, but not medications. The number of Moked sites has risen with time. Table 2 shows the year each site opened and the number of visits in 1995. Overall, there are currently some 85,000 Moked visits per year, with the monthly number per site ranging from approximately 500 to 2,000.

**Table 2: Moked Utilization**

Moked	Year Opened	1995 Physician Visits
Hasharon (pediatrics)	1991	18,631
Hasharon (adults)	1992	8,221
Rishon Lezion	1994	9,204
Holon	1993	22,445
Motzkin	1994	7,835
Ashdod	1995	2,332
Petah Tikva <sup>1</sup>	1995	8,400
Ramla <sup>1</sup>	1995	1,200
Terem	1989	8,727
<b>Total</b>		<b>86,995</b>

<sup>1</sup> Projected, based on 3 months of utilization

### ***Meuhedet***

The Meuhedet sick fund insures approximately 10% of the population and currently has 25 UCC facilities. Some are located in the sick fund's community clinics while others are outsourced, with services provided by private vendors via contract. Most open at around 19:00 and close at midnight, with some remaining open all night. At all facilities the sick fund charges NIS 40 per patient visit. The fund itself typically contributes an additional NIS 60-100 per visit.

Maram facilities are typically located in KHC community clinics. Most have a pharmacy and offer radiology and laboratory services. They are usually open during the hours that the community clinic system is closed. There is some variation, but typically these hours are: Sunday, Tuesday and Thursday, 19:00-24:00; Monday, Wednesday and Friday, 16:00-24:00; Saturday and holidays, 10:00-24:00. The Maram system usually collects a set fee per patient. In 1989 it was NIS 15; today it is NIS 60 for adults and NIS 30 for children. The fee includes physician exam, lab services and x-rays, but not medications. There have been periods when the fee structure was modified (e.g., free care for children under six); today care is free for selected medical problems. The physician staff at each Maram site is usually one or two doctors, typically with training or specialization in Family Medicine. The physician is paid on the basis of patients seen (originally this equalled approximately two-thirds of the patient fees, although this was recently decreased); some sites provide a "guaranteed minimum" per shift. The non-physician staff varies with the services provided (e.g., not all sites have a pharmacist, x-ray or lab technician). Non-physician staff members are paid on an hourly basis at overtime rates. Their exact number per site will vary and is influenced by local work load and financial options/constraints.

Importantly, Maram facilities provide additional services. For example, if a KHC member needs a prescription, he can have it filled during the hours that the site is open. Also, community physicians use these sites as a resource for urgent lab and x-ray work.

### ***Moked (Maccabi)***

Kupat Holim Maccabi is Israel's second largest sick fund, insuring approximately 20% of the population. Its outpatient care is provided via both community clinics and independent physicians. The former are typically open during the day, while the latter often have evening hours. The first Moked, opened in 1989 in Maccabi's Ramat Hasharon community clinic, is for children, and only pediatricians have been hired. This site is the exception to the rule in another way, being open all day, functioning at a level equivalent to that of an ER and offering one-day stay capacities. Importantly, this facility is also used by physicians for urgent lab testing and radiology studies, and as a resource for second opinions. It collects a fee if the patient's physician is otherwise available. In general, an attempt is made to not charge for services if the visit is deemed appropriate.

The rest of the Moked facilities are open only after regular clinic hours. This includes a Moked for adults in the Ramat Hasharon community clinic which, unlike the pediatric version, is open only from 19:00-23:00. Two of the facilities provide only orthopedic services. Most have a pharmacy and offer radiology and laboratory services.

motivation being recognition of the need for a less expensive alternative to the emergency room in order to provide urgent services when the clinic system is unavailable.

The number of Maram sites has varied over the years. They were first established where no Clalit alternative (i.e., ER/hospital) was available. Table 1 shows the number of visits to the sites in 1993 and 1994. Overall, there are approximately 250,000 visits per year, with some Maram sites seeing five times as many patients per month as others. Some of the less busy sites have been closed.

**Table 1: Maram Utilization (1993, 1994)**

Region	Clinic	1993	1994
Jerusalem	Strauss	30,397	32,701
Tel Aviv-Jaffa	Zamanhoff	15,146	13,208
	Mansbech	9,699	10,634
	Terem	908	1,388
Dan-Petah Tikva	Haro'eh	11,505	10,222
	Yehud	944	283
	Ramatayim	797	475
	Petah Tikva	2,303	10,283
Haifa	Lynn	29,965	28,482
	Zevulun	28,001	30,489
	Nahariya	14,969	13,592
	Karmiel	11,589	11,921
	Acre	2,721	10,241
Center	Rishon Lezion	9,250	10,033
	Lod		1,390
	Ashdod	2,896	5,935
	Rehovot	860	6,342
South	Beersheba	9,670	10,125
	Ashkelon	2,416	6,362
	Kiryat Gat	505	754
Sharon/Samaria	Raziel Netanya	17,605	18,923
	Degania Hadera	11,944	11,818
	Herzlia South	4,748	9,827
North	Safed South	3,197	1,764
	Nazareth Ilit	1,056	3,219
	Nazareth A	1,912	6,846
	Rekati Tiberias	3,900	3,380
<b>Total</b>		<b>228,903</b>	<b>270,637</b>

intervention the more beneficial for the patient. Traditionally, this spectrum is divided into the following segments: no care, routine care, urgent care, and emergency care. Unfortunately, classifying an individual at a given moment in time (triage) can be very difficult.<sup>1</sup>

Others have looked at "what makes an emergency simply urgent" (Alemagno et al., 1986). Not surprisingly, there is no gold standard to classify whether a condition requires urgent or emergent care. Differences of opinion among patients, among physicians, and between patients and physicians, may be large. Also, this perception is likely to be very different when looked at prospectively versus retrospectively.

Based on our model these difficulties are expected. For most diseases there is incomplete objective data on the success of intervention overall, let alone on the effect of time. In addition, the probability of disease is difficult to calculate. Further, the "value" of these factors is subjective: What is an outcome worth, and what is the value of a reduction in fear? Finally, our two factors - window of opportunity and avoided outcome - do not always correlate. For example, a superficial wound requiring stitches benefits from timely intervention, yet the outcome avoided is typically not severe. Yet they usually do correlate. For example, in the instance of acute myocardial infarction the outcome which is avoided (high morbidity and mortality) can be great and the window of opportunity small (ideally, less than four hours, though the sooner the better), meaning emergency care is indicated.

It is important to distinguish urgent care from after-hours care. After-hours care includes any care (emergent, urgent or routine) that is provided after hours. One could argue that any visit is "appropriate" under the rubric of after-hours care. Conversely, assessment of the appropriateness of urgent care necessitates evaluation of the triage process.

#### **4. Overview of UCC Options**

There are a number of options for urgent care in Israel: Maram (Clalit), Moked (Maccabi), MDA, Terem, and emergency rooms. The Meuhedet and Leumit sick funds have also developed systems that closely resemble Moked. Each alternative has minor variations within it.

##### ***Maram (KHC)***

Kupat Holim Clalit (KHC) is Israel's largest sick fund, insuring approximately 60% of the population. Most of its outpatient care is provided in a community clinic setting, the typical hours being 08:00-16:00. Clalit was the first sick fund to establish a UCC, its primary

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1 This includes acute exacerbations of chronic problems.

## **2. Data Sources**

The content of this report represents both qualitative and quantitative research. The data (statistics) represent material gathered from many sources, primarily Israel's Ministry of Health and the country's sick funds. When these data are publicly available, a reference will be provided. Much of the raw data were obtained with the understanding that provider and sick fund confidentiality could be maintained. Manipulation and combining of data were performed by the investigators. In addition, much of the background and discussion sections represent meetings with many of the "players" in the health care system and, more specifically, individuals involved in providing acute medical services.

## **3. Terminology: What is "Urgent Care?"**

Before proceeding, we should define "urgent care" or, in other words, what care requires urgent provision. Conceptually, the rapidity with which care is provided should be governed by two factors: a) the importance of intervention, and b) the impact of time.

- : The importance of intervention is a reflection of the severity of the outcome (morbidity and/or mortality) that can be *avoided*, not the severity of the outcome itself. This model is probably linear, such that as severity rises, the need to intervene rises. For example, the need to intervene is greater in order to avoid death than to avoid two days in bed. This model becomes more complicated when applied to the typical scenario of uncertainty (i.e., when it is unclear whether disease is present) such that the probability of disease must be factored in. For example, if the chance of a ruptured appendix is only 20%, exploratory surgery is indicated. This process of evaluating whether to intervene is called the decision threshold or the test-treatment threshold (Cutler, 1985) (i.e., at what point you should intervene).

The effect of time on any outcome can be derived for any medical condition. Typically, one might expect this model to follow an S-shaped curve representing time vs. the probability of a bad outcome for a given problem. Thus, when the disease process begins, time has the greatest impact, and as time passes the likelihood of a bad outcome increases. At some point the ability to greatly alter this outcome changes, and a flat or mildly upsloping curve ensues. For example, if a person's heart stops, one has a few minutes to avoid severe neurologic damage. As this time span passes, the ability to avoid a bad outcome diminishes. Similarly, if an individual suffers from cervical dysplasia, one has a few years to "catch the cancer in time," after which therapy is available but less likely to succeed in avoiding a bad outcome. Thus, this s-shaped curve typically defines a window of opportunity, a time-frame wherein intervention is most successful and most desired.

Together, these factors define a continuous spectrum during which a more rapid intervention is desirable. At one end of the spectrum there is no need for care (e.g., intervention does not help, or waiting causes no harm). At the other end of the spectrum, the quicker the

## **1. Background**

For the past 50 years, most acute health care in industrialized countries has been provided in either an emergency room (ER) or outpatient environment (e.g., community clinic or physician's office). House calls, while an option, are only rarely utilized in most industrialized countries.

During the past 10 years, alternative sites for acute medical care - called urgent care centers, or UCCs - have appeared. The primary reason for their creation has been perceived limitations in the provision of care in the community clinic and ER settings. Community clinic limitations include the lack of rapid availability (either closed or booked) and insufficient services (e.g., consults, labs and radiology). ER limitations include inconvenience (e.g., long waiting times and lack of privacy), price (relatively expensive) and inappropriate use (a third to two-thirds of all ER visits could be managed in an outpatient setting [Dale et al., 1995]). Thus, the original goal of alternative sites was to provide improved access (both in availability and necessary services) less expensively and more quickly than before. Recently, Israeli sick funds began to establish such sites due to consumer demand, and to attract new insurees (Anderson, 1986).

Prior to the research presented here, little was known about the utilization of UCCs in Israel. There has been no need for licensing, so the number of sites remained unknown. No governmental body had collected data, so utilization levels were unknown. Finally, it was unknown whether these sites were cost-effective, predominantly through the avoidance of ER visits.

Israel's sick funds are operating in an increasingly tight fiscal environment. They are therefore re-assessing the need to maintain these sites, as well as the services that should be provided, during what hours, and for what price. The Ministry of Health is also interested in this information, primarily for reasons of quality assurance and health policy in hospital expansion. (The rapid increase in the number of UCCs has provided the needed impetus for measuring quality as well as where and how much service is being provided. However, to accurately predict the need for ER expansion, the ministry must understand the impact of these sites on ER use.)

This report is the first in a two-part series. It reviews the history of the development of UCCs in Israel and describes the services currently available. It also provides an estimate of utilization, and analyzes the cost-effectiveness of the services. The second report will describe the patient population that uses these facilities and how patients choose specific sites. Moreover, it will specifically assess the percentage of patients using these services who, if they were unavailable, would go to an ER, and the percentage of those who should do so.

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Some UCCs are more costly than others. Certain sites can be made more cost-effective by encouraging and fostering more efficient and appropriate use. Depending on what alternatives are feasible, closing a number of UCCs for financial reasons may be warranted. However, the sick funds may nonetheless desire to maintain such sites for reasons such as marketing and the provision of needed health care services.

Israel's sick funds should define their strategies regarding urgent care centers. Today, UCC strategies vary greatly. A center's structure, staffing, and function can and do vary across the spectrum from clinic to ER equivalent. To further complicate matters, the goals of an urgent care center may vary during the course of a single day. For example, when a clinic alternative is available, it may be appropriate to offer only urgent care, and not routine care. Aside from the patient's personal actions based on self-perception of need, the use of a UCC will also be determined by a sick fund's triage and reimbursement process. Thus, sick fund decisions on co-payment levels and how they might vary according to medical condition will affect UCC utilization. Further, a sick fund can take a more active role in triaging insureds (e.g., phone triage). Its overall strategy will affect volume and efficiency, and therefore the economic viability of the sites.

Our study is relevant to long-term planning by the Ministry of Health, for if UCCs reduce ER visits, there may be a need for fewer hospital beds and facilities. We also know from the literature that approximately 50% of all ER visits (1,000,000) are inappropriate, and that UCC treatment would be sufficient. If we could triage these patients to UCCs with the assumption that one-third of all UCC cases actually require urgent care, an ideal UCC utilization rate would be 3,000,000 visits, or five times the present number.

We conclude that urgent care services are being extensively utilized and are often cost-effective. Increased and more efficient use of urgent care services may further decrease the need for ER services. Ongoing work is needed to evaluate, and perhaps modify, the patient population that is using these facilities. The first step in such an evaluation should be a better understanding of the population that uses these services and how it chooses among the alternatives. Finally, there is a need to evaluate and compare the quality of care provided at these sites.

utilization. In Jerusalem, where data are available, it appears that increased UCC use was indeed associated with a decrease in ER visits.

The cost-effectiveness of a UCC from a sick fund's perspective is governed by the UCC's operating expenses and collections, and the money saved by avoiding ER visits. We performed an in-depth analysis of the cost-effectiveness of the Kupat Holim Clalit (KHC) sick fund's Jerusalem UCC for May, 1995. During that month, overall operating expenses totalled approximately NIS 200,000, while collections from the 2,500 patient visits yielded NIS 125,000, for a net loss of approximately NIS 80,000. Since no data exist on the number of ER visits which were avoided during that period, we performed a sensitivity analysis. For example, had 25% (625) of those 2,500 Maram patient visits taken place in emergency rooms, it would have cost the sick fund NIS 200,000 (based on a per-visit cost of NIS 320). Thus, despite an operating loss of approximately NIS 80,000, the net savings by the sick fund would still be approximately NIS 120,000. We then calculated a "break-even point." If 10% (250) of those UCC patient visits had taken place in the emergency room, the money saved by avoiding the ER visits would equal the operating loss of NIS 80,000.

A similar analysis was performed for the entire KHC UCC system for 1995. Without accounting for avoided ER visits, the system cost KHC NIS 8-12 million. If 25% of the patient visits had otherwise taken place in ERs (a conservative estimate), the system's operation provided a theoretical savings to KHC of between NIS 8 and 12 million. Of course, not all UCC facilities are equally cost-effective, and break-even points vary from 10-40%, 10-15% being the norm. The patient survey, which is described in detail in our second report, suggests that if no UCC had been available, fewer than 20% of the patients would have been willing to wait until morning, with over 80% saying they would have sought care elsewhere that night (presumably in a hospital emergency room). According to the attending physicians, approximately half of the patients had medical problems that could not wait until morning.

We then estimated cost-effectiveness under a variety of assumptions for all of the sick funds. For example, if the average 1995 cost to a sick fund for a UCC visit was NIS 60, and 30% of these visits avoided ER use (at NIS 320 per visit), the centers saved the sick funds NIS 21 million. It is also clear that if only 20% of UCC users would have gone to the ER in the absence of the UCC option, and operating costs had been more than NIS 60 per visit, the centers would have lost money. However, the typical UCC is probably cost-effective after taking into account savings from avoided ER visits.

Whether the UCC system is cost-effective from a system-wide perspective is less clear. Analysis of the issue would need to deal with fixed hospital and personnel costs as well as long-term building/expansion needs.

## Abstract

The past decade has seen many urgent care centers (UCCs) being established in Israel. The primary reason for their creation has been perceived limitations in the provision of care in other settings, such as community clinics (limited hours and services) and hospital emergency rooms (long travel and waiting times, and high costs). The original goal of the UCC sites was to provide improved access and more complete service less expensively and more quickly than before.

The National Health Insurance Law, enacted in 1995, stipulates that Israel's sick funds must maintain a balanced budget. They are therefore re-assessing policies regarding UCC services, infrastructure, operating hours and fees. The Ministry of Health has also expressed interest in this issue, primarily for reasons of quality assurance and hospital expansion and bed planning.

- Prior to this study, the number of UCCs in Israel and their utilization was unknown. Further, no attempt had been made to evaluate whether they were cost-effective.

This report utilizes material gathered primarily from the Ministry of Health and the country's sick funds in order to review the development of UCCs in Israel and describe the services currently available. It also provides an estimate of UCC utilization and the cost-effectiveness of their services.

The report is the first in a two-part series. The second report will describe the patient population that uses these facilities and how patients choose specific sites. Moreover, it will specifically assess the percentage of patients using these services who, if they were unavailable, would go to an ER, and the percentage of those who should do so.

Each sick fund has developed its own system for providing urgent care services. Most services are provided after the regular sick fund clinics close, though usually not after midnight. They are typically contracted out or provided in the sick fund community clinic facilities themselves. The gamut of services (e.g., radiology, laboratory and pharmacy) varies. The patient typically bears partial financial responsibility for the visit.

In 1994 there were close to 600,000 visits to UCC facilities, representing a rate of 109 visits per thousand population. For comparative purposes, in 1994 there were 1,895,000 ER visits (351 per thousand). Thus, the current ratio of UCC to ER visits is approximately 1:3.

From the creation of the UCC system until 1992, there was a steady decline in ER utilization. Unfortunately, we do not have national figures for UCC visits during those early years, and thus cannot determine whether this decline was paralleled by an increase in UCC



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Jerusalem 91130 Israel  
Tel: (02) 655-7400  
Fax: (02) 561-2391

**Urgent Care in Israel:  
What Role for Community-based Alternatives  
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This paper was prepared in the framework of the Cooperative Program in Health Policy  
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