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Khairunisa Lalani  
DePaul University, KLALANI1@depaul.edu

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**Translation and Validation of the Caprini Risk Assessment Score for Urdu Speakers**

Khairunisa M. Lalani

Department of Nursing, DePaul University

NSG 602: DNP Project Practicum

Dr. Shannon Simonovich

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## Translation and Validation of the Caprini Risk Assessment Score for Urdu Speakers

### Abstract

**Background:** Venous Thromboembolism (VTE) is a potentially fatal condition and determination of risk level and identification of risk factors for VTE should be performed during the post-operative period. The Caprini Risk Assessment Score (CRS), is a validated risk assessment instrument tool used widely to predict postoperative VTE in the Western world, but it has limited utility among resource-poor and developing countries due to the limited English language proficiency of potential instrument users.

**Aims:** We aimed to translate the CRS tool to Urdu and validate its use in the Urdu speaking population through a correlation of self-administered and healthcare professional-administered scores.

**Methods:** The CRS was translated to Urdu by a certified translation service. Focus group interviews were conducted to identify comprehension challenges with the translation. For validation, self-administered CRS scores were compared to advanced practice nurse (APN)-administered responses. Validation participants completed the revised version of the CRS on their own. The advanced practice nurse (APN), blinded to their answers, filled out the same form with the same participants via interview. Additional reliability testing of the instrument was performed using a multi-rater rating system. The study was approved by the DePaul IRB under a waiver of informed consent. Reliability testing of the instrument was performed using a multi-rater rating system and their responses were analyzed as well.

**Results:** A 6-member focus group fluent in both English and Urdu (age 30-65, average age 51.5), average education level 12.66) provided feedback and final revisions for the translated tool. The 30 Urdu-speaking volunteers (average age, 50% male, and all had at least a 12<sup>th</sup>-grade education) completed the final tool and were interviewed by the APN to obtain comparative scores. Using SPSS v.23, Pearson's correlation coefficient (0.869) between patient- and APN-administered scores was excellent. The correlation resulted in a statistically significant finding of 0.01 level ( $p < 0.01$ ). The content validity index Content validity was

performed using five experts and analysis was performed using the Cronbach alpha coefficient for an agreement which revealed a rating of 0.869.

**Conclusion:** This study successfully translated and validated the first Urdu version of the patient-completed risk assessment model for VTE, which is another step forward in addressing the huge economic and health burden related to VTE.

### **Introduction**

Venous thromboembolism, VTE, is a major complication in surgical patients. VTE compromises pulmonary embolism (PE), and/or deep vein thrombosis (DVT). PE is the main cause of death in patients who undergo aesthetic plastic surgery (Cuenca-Pardo et al., 2019). Nonfatal PE and DVT, not only cause postoperative mortality, but can also cause long-term complications including pulmonary hypertension, chronic venous insufficiency, venous congestion, and chronic leg swelling. DVT is the formation of a blood clot in the legs which if left untreated can travel to the lungs and result in a PE. The risk of VTE increases with age, with 60% of all VTE events occurring in those 70 years and older. The overall incidence of VTE is 1 to 2 per 1000 person-years in the general population, which rises to 8 per 1000 person-years in people older than 85 years (Phillippe, 2019). Risk assessment is the first step in preventing death and disability from VTE. A risk assessment must be undertaken for post-operative patients so that timely adequate prophylaxis can be initiated to prevent death and disability. In addition, reducing the occurrence of VTE in postoperative patients is imperative in reducing long-term health complications, thus encouraging positive health outcomes. Personal risk factors combined with bleeding risk should guide timely and adequate prophylaxis.

One of the risk assessment tools widely available to predict postoperative VTE, is the Caprini Risk Assessment score, CRS. (Please refer to Appendix A for the CRS). The CRS comprises of questions divided into individual risk categories. CRS uses individualized risk factors including demographics, medical/surgical history, familial history, and the procedure's type/anticipated length to predict

postoperative VTE. The summation of the risk factors determines the risk of sustaining a postoperative VTE. Based on the total risk score (low, moderate, or high), mechanical and or chemical prophylaxis is recommended. The CRS scoring system provides a consistent, thorough, and efficacious method for risk stratification and selection of prophylaxis for the prevention of venous thrombosis (Cronin et al., 2019). Prasertcharoensuk et al. (2020) elaborate that PE is associated with higher mortality, therefore, surgical patients should receive VTE prophylaxis when the CRS score is high.

One reason why CRS remains underutilized is its limitations to the English language, specifically in the vulnerable population living in developed countries. In 2018, Paz Rios et al. elicited some challenges related to the use of CRS that included: relative complexity for reliable use, interpreter dependence, limitation of one language, and time-consuming for health care providers. Our study was designed to use focused interview skills to help guide the validation of the scale for Urdu speakers. Paz-Rio et al. (2018) conducted a similar study where they validated a patient who completed CRS for Spanish, Arabic, and Polish speakers with excellent correlation and agreement when compared to the CRS completed by a trained physician. Our study aimed to provide the necessary gaps in understanding the challenges with CRS for participants whose native language is Urdu. Urdu is the primary language spoken in Pakistan and other South-East Asian countries.

### **Literature Review**

VTE etiology follows the Virchow triad: endothelial injury, venous stasis, and hyper coagulopathy causing thrombus formation. If left untreated, a DVT can result in a PE and can be fatal. Bigli et al. 2016 explained that VTE is one of the significant, yet preventable causes of in-patient morbidity and mortality. The post-operative immobility state increases the risk of developing a DVT in the absence of adequate prophylaxis. Hospitalized surgical patients are at higher risk of VTE because of immobility and hypercoagulable state; VTE occurs in up to 25% of these patients (Yang et al., 2020). In addition, the majority of patients who develop perioperative VTE are asymptomatic; thus, it is difficult to assess the actual incidence, and venography and fibrinogen uptake tests have shown the incidence of deep

venous thrombosis (DVT) to be up to 25%. The incidence is even higher in patients with malignancy (Laryea et al., 2013). VTE is the leading cause of non-cancer deaths, following major abdominal or pelvic cancer surgery (Frankel et al., 2020). Risk stratification must be undertaken in the pre-operative period to initiate timely prophylaxis and avoid post-operative VTE, including its long-term health complications.

Presently, there exist several instruments that predict the probability of sustaining a VTE and treatments accordingly. Among these is the American College of Chest Physicians established guidelines, the Khorana score for detecting VTE in cancer patients, the Wells criteria for VTE, and the CRS for postoperative VTE. In addition, a balance between individual risk factors and the bleeding risk should be considered when deciding on treatment modalities for postoperative anticoagulation. According to Cronin et al. (2013), Dr. Joseph Caprini led a group of physicians, nurses, and medical students, developed the CRS, and first published it in 1991. CRS scoring system provides a consistent, thorough, and efficacious method for risk stratification and selection of prophylaxis for the prevention of venous thrombosis. CRS uses individualized risk factors that include demographics; medical/surgical history, familial history, and the procedure type/anticipated length. A study conducted by Bo et al. (2010) for patient stratification in China suggested that the Caprini CRS could be effectively used to stratify hospitalized Chinese patients into DVT risk categories, based on individual risk factors. Krauss et al. (2019) conducted a study for implementing and validating of 2013 CRS for arthroplasty patients. They concluded that this instrument provided a consistent, accurate, and efficacious method for risk stratification. Frankel et al. (2020) elaborate that the CRS has been validated in otolaryngology, thoracic, gynecologic oncology, and high-risk reconstructive and plastic surgery patients. The above highlights the established validity and reliability of the assessment instrument for post-operative patients.

Although the CRS has been used extensively, and validation studies conducted, there are some limitations to its use. One of the evident challenges is English proficiency. The concept of the validity of translated scales/scores was studied while conducting this literature review. In a study by Papadima et al. (2020) were the authors of a Menopause-specific Quality of Life (MENQOL) questionnaire in the Greek

language concluded that the Greek version of the MENQOL is a reliable instrument for evaluating the quality-of-life measures in menopausal women. In addition, Bangash et al. conducted a similar study in 2020 where they sought to validate an Urdu translation of premature ejaculation diagnostic instrument (PEDT) and concluded that the translated version has validity and internal consistency. Similar research was done by Khan & Adil (2020) for the translation of the Friendship scale to Urdu that the Urdu version of the scale is a reliable and validated measure for that population. In addition, Jahangir & Batool (2020) aimed to translate Trust in Close Relationship scale (1989) into Urdu for married couples in Pakistan and established that this Trust scale translated version has good reliability and validity. In the light of the above review, it is evident that translated and validated scales show reliability when used for a specific population.

## **Methods**

We recruited six participants for our focus group and thirty participants for our validation group. Participants in both groups were eighteen years or older, were of Southeast Asian descent, and were proficient in both Urdu and English languages. CRS was translated into Urdu by a professional translation agency. One expert physician back-translated the Urdu-translated version of CRS into English. We also conducted the content validity exercise to check the reliability of the translated scale with five experts.

### **Step 1: Focus Group Interviews**

Between August and September 2021, we conducted focus group interviews consisting of six participants. We aimed to understand the comprehension difficulty with the Urdu translated version of the CRS. Participants were asked to underline the comprehension difficulty with the translated version and find discrepancies in the language/words used for the score. All focus group participants highlighted similar terms for correction. Their feedback was then incorporated into the final translated version for the validation phase (See Appendix B for the Urdu Translation).

### ***Step 2: Validation Phase***

From September to December 2021, we performed the validation phase of the study. For this phase, we recruited thirty participants. The participants were provided the final translated version of the CRS. A full explanation of expectations related to the score was provided. Participants' BMI was calculated by the APN to avoid discrepancies in the score. An APN blinded to those answers filled out the translated CRS Urdu version for the same participants. It took participants an average of eight to fifteen minutes to fill out the score. No participant left the study or found the score to be too difficult to comprehend.

### ***Step 3: Analysis of the Content Validity Index***

To test the validity of the translated scale, we conducted a content validity index exercise using five experts. Three out of the five experts were physicians, one was a doctorate-prepared nursing faculty and one was a doctorate-prepared nurse practitioner. The content validity index was used to determine any issues in terms of the relevancy of the items in the CRS-Urdu using a 4-point scale with the following anchor and values: 1= not relevant, 2 = somewhat relevant, 3 =quite relevant, 4 = highly relevant. (Please refer to Appendix C for details). Researchers typically determine the overall CVI, by each item in the CVI is computed as the number of experts giving a rating of either 1 or 2 (thus dichotomizing the ordinal scale into somewhat relevant and not relevant), and then divided by the total number of experts (Polit & Beck, 2006; Polit et al., 2007).

## **Results**

### **Study Participants**

We recruited six participants for the focus group. Their feedback was obtained for making changes to the final version of the translated version of the risk assessment score in Urdu. In the validation phase of the study, we recruited thirty participants (n=30). The group consisted of fifteen females (n=15) and the remainder of the 15 participants were males (n=15). The age of the participants ranged from 29 to 65 years with a mean age of 50.67 years. The participants spent a median of 10 minutes (8-12 minutes) filling out the form. Out of the 30 participants 9 were high school graduates (30%), 12 had



a bachelor's degree (40%), and 9 had a master's degree (30%). When combined, the majority of the participants were classified as low risk based on the VTE based on the CRS (scores between 0-3) with an exception of one participant who scored a high-risk score of 7. None of the participants left the study and no participant found it difficult to comprehend. The content validity index of the scale was completed by a total of five raters, out of which three were physicians, a doctorate-prepared nurse practitioner, and a Ph.D in nursing.

### ***Key Findings***

The Pearson Correlation testing was performed to assess for agreement between the answers of the participants and the advanced practice nurse. The correlation between the two scores was excellent. The correlation resulted in a statistically significant finding of  $p < 0.01$  level (See table two for details of the correlation statistics findings). The content validity index, CVI, was completed by the five raters. The CVI was analyzed using the multi-rater alpha coefficient. The above test revealed a content validity index of 0.868. The correlation analyses demonstrated a statistically significant relationship between the scores of the participants and the APN. ( $p < 0.01$ ).

Variables	Cohort, n = 30
Age (mean [range])	50.67 [29-65]
Gender (%)	
Men	50%
Women	50%
Education level (n [%])	
Elementary	
High School	9 [30]
College	12 [40]
Postgraduate	9 [30]

### *Correlations*

		Recorded participant risk score	Recorded APN risk score
Recorded participant risk score	Pearson Correlation	--	
	N	30	
Recorded APN risk score	Pearson Correlation	1.000**	--
	Sig. (2-tailed)	< 0.01	
	N	30	30
**Correlation is significant at the 0.01 level (2-tailed)			

### ***Reliability Statistics***

Cronbach's Alpha	N of Items
0.868	31

### **Discussion**

It is well documented that VTE risk assessment should be undertaken for post-operative patients so that timely adequate prophylaxis can be initiated to prevent death and disability from VTE. Dashe et al. in 2020 emphasized that the CRS is a widely accepted model with established history and utilization as a reliable predictive VTE risk assessment instrument. One reason why the CRS remains underexplored is its English proficiency. Similar studies related to the validation of scales have been conducted. Jahangir & Batool (2020) aimed to translate Trust in Close Relationship scale (1989) into Urdu for married couples in Pakistan and established that this Trust scale translated version has good reliability and validity. Our goal for the study was to bridge the necessary gaps in understanding the CRS for participants whose native language is Urdu. Our study aimed to validate a patient-completed CRS for Urdu speakers. We also aimed to find the content validity index of the translated scale by five experts. Our key findings included an excellent correlation between the patient's completed CRS score with the APN's completed CRS score. The correlation resulted in a statistically significant finding of 0.01 level ( $p < 0.01$ ). In addition, the reliability statistic used to analyze the multi-rater content validity index, the Cronbach's alpha showed a statistically significant coefficient of 0.868.

We have created and validated the first Urdu version of the patient-completed Caprini risk assessment score. Our study's objectives were similar to the one conducted by Paz Rios et al. (2018), where they sought to validate a patient who completed CRS for Spanish, Arabic, and Polish speakers. The authors created and validated the first-ever Spanish, Arabic, and Polish versions of the patient-completed

CRS with excellent correlation and agreement when compared to the CRS completed by a trained physician. Our study utilized a similar model for conducting validation of the CRS for Urdu speakers. Our study showed an excellent correlation between the CRS scores completed by the participants when compared to the CRS scores completed by the APN. The study accomplished our goal to understand the necessary gaps in understanding the CRS for participants whose native language is Urdu.

The study was strong we were able to recruit participants from a diverse South-East Asian population. One of the strengths of our study was the utilization of interview techniques to incorporate changes to the final version of the CRS. The study showed an excellent correlation between the two scores and the content validity index of the multi-rater was excellent. A few limitations of our study were the small sample size and the inclusion of participants below a high school graduation level.

### **Clinical Implications**

Our study aimed to understand the challenges with the understanding of risk assessment scales for patients whose native language is not English. This study validates the fact that when risk assessment scales are provided in the native language, patients can comprehend them while clinicians can utilize the scale to put measures in place and void adverse clinical outcomes. This is extremely important since completing the CRS allows for understanding the risks associated with VTE, so that appropriate life-saving timely prophylaxis can be initiated. This translated and validated scale now is readily available for both clinicians and patients for utilization in a clinical setting. One limitation of using risk assessment scores in English is the time commitment on behalf of the clinicians. With the availability of the translated version clinicians won't be pressed for time to translate the original English scale for the Urdu-speaking population. This will allow for patients' empowerment as they become active partners in shared decision-making. In addition, using the score will allow for providing adequate prophylaxis in a less timely fashion since time will be saved with a readily translated score. The self-completed questionnaire, combined with a discussion between the patients and the clinical team to devise a post-operative plan will serve both the out-patient and in-patient population. One thing to consider is that the scale should not be

the only resource utilized when deciding on postoperative prophylaxis. The patient-provider discussion and other health-related factors such as the risk of bleeding should also be considered.

### ***Implications for Future Research***

Hospital admissions for DVT and PE represent a substantial cost burden to the US health care system. Gross et al. (2016) report that the thrombosis events conservatively cost the US healthcare system \$7-10 billion each year. In addition, Stone et al. (2017) explain that VTE affects an estimated 1 per 1,000 people and contributes to 60,000-100,000 deaths annually. The overall incidence of VTE is 1 to 2 per 1000 person-years in the general population, which rises to 8 per 1000 person-years in people older than 85 years (Phillippe, 2019). Clinicians have the potential to reduce the clinical and economic burden of VTE by ensuring to provide risk stratification using validated tools to avoid adverse health care outcomes. Steps must be taken to prevent thrombosis. Our study adds to this purpose by allowing patients to fill out the form in their language, saving time and aiding in preventing adverse health care outcomes.

### **Conclusion**

Predicting the post-operative thrombosis risk is imperative in avoiding adverse health outcomes. Allowing the patients to calculate risk assessment in their native language allows for shared decision making thus enhancing compliance. The CRS validation study was undertaken to identify the fact that language barriers can hinder the understanding of laymen people and they may not benefit from the risk assessment needed for positive health outcomes. The first Urdu version of the patient-completed risk assessment model is another step forward in addressing the huge economic and health burden, decreasing post-op thrombosis and resulting complications, thus improving health care outcomes. Similar studies are warranted to understand the knowledge gap encountered while completing the CRS by people whose native language is not English.

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## Appendix A Caprini Risk Assessment Score

# Are You at Risk for DVT?

**FOR PATIENTS**      Complete this risk assessment tool to find out.



Name \_\_\_\_\_

Male  
 Female

Today's Date \_\_\_\_\_

Only your doctor can determine if you are at risk for Deep Vein Thrombosis (DVT), a blood clot that forms in one of the deep veins of your legs. A review of your personal history and current health may determine if you are at risk for developing this condition. Take a moment to complete this form for yourself (or complete it for a loved one). Then be sure to talk with your doctor about your risk for DVT and what you can do to help protect against it. Your doctor may want to keep a copy in your file for future reference.

**Directions:**

- Check all statements that apply to you.
- Enter the number of points for each of your checked statements in the space at right.
- Add up all points to reach your total DVT Risk Score. Then, share your completed form with your doctor.

**Add 2 points for each of the following statements that apply:**

- Age 61–74 years \_\_\_\_\_
- Current or past malignancies (excluding skin cancer, but not melanoma) \_\_\_\_\_
- Planned major surgery lasting longer than 45 minutes (including laparoscopic and arthroscopic) \_\_\_\_\_
- Non-removable plaster cast or mold that has kept you from moving your leg within the last month \_\_\_\_\_
- Tube in blood vessel in neck or chest that delivers blood or medicine directly to heart within the last month (also called central venous access, PICC line, or port) \_\_\_\_\_
- Confined to a bed for 72 hours or more \_\_\_\_\_

**Add 3 points for each of the following statements that apply:**

- Age 75 or over \_\_\_\_\_
- History of blood clots, either Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE) \_\_\_\_\_
- Family history of blood clots (thrombosis) \_\_\_\_\_
- Personal or family history of positive blood test indicating an increased risk of blood clotting \_\_\_\_\_

**Add 5 points for each of the following statements that apply now or within the past month:**

- Elective hip or knee joint replacement surgery \_\_\_\_\_
- Broken hip, pelvis or leg \_\_\_\_\_
- Serious trauma (for example, multiple broken bones due to a fall or car accident) \_\_\_\_\_
- Spinal cord injury resulting in paralysis \_\_\_\_\_
- Experienced a stroke \_\_\_\_\_


**Add 1 point for each of the following statements that apply now or within the past month:**

- Age 41–60 years \_\_\_\_\_
- Minor surgery (less than 45 minutes) is planned \_\_\_\_\_
- Past major surgery (more than 45 minutes) within the last month \_\_\_\_\_
- Visible varicose veins \_\_\_\_\_
- A history of Inflammatory Bowel Disease (IBD) (for example, Crohn's disease or ulcerative colitis) \_\_\_\_\_
- Swollen legs (current) \_\_\_\_\_
- Overweight or obese (Body Mass Index above 25) \_\_\_\_\_
- Heart attack \_\_\_\_\_
- Congestive heart failure \_\_\_\_\_
- Serious infection (for example, pneumonia) \_\_\_\_\_
- Lung disease (for example, emphysema or COPD) \_\_\_\_\_
- On bed rest or restricted mobility, including a removable leg brace for less than 72 hours \_\_\_\_\_
- Other risk factors (1 point each)\*\*\* \_\_\_\_\_

\*\*\*Additional risk factors not tested in the validation studies but shown in the literature to be associated with thrombosis include BMI above 40, smoking, diabetes requiring insulin, chemotherapy, blood transfusions, and length of surgery over 2 hours.

**For women only: Add 1 point for each of the following statements that apply:**

- Current use of birth control or Hormone Replacement Therapy (HRT) \_\_\_\_\_
- Pregnant or had a baby within the last month \_\_\_\_\_
- History of unexplained stillborn infant, recurrent spontaneous abortion (more than 3), premature birth with toxemia or growth restricted infant. \_\_\_\_\_



**Add up all your points to get your total Caprini DVT Risk Score**

**What does your Caprini DVT Risk Score mean?**

- Risk scores may indicate your odds of developing a DVT during major surgery or while being hospitalized for a serious illness.
- Studies have shown if you have 0-2 risk factors, your DVT risk is small. This risk increases with the presence of more risk factors.

For more information call ISMS at 1-800-782-4767, ext. 1678  
[www.isms.org](http://www.isms.org)

## Appendix B: Urdu Translation of the Caprini Risk Assessment Score.

# کیا آپ کو DVT کا خطرہ ہے؟

معلوم کرنے کے لیے خطرے کا ٹول مکمل کریں۔

مرد

عورت

آج کی تاریخ

نام

ایا آپ کو اندرونی رگوں میں انجماد خون DVT کا خطرہ ہے، جو ایسا انجماد خون ہے جو آپ کی ٹانگوں کی اندرونی رگوں میں بنتا ہے۔ آپ کی موجودہ صحت کا ایک جائزہ یہ تعین کر سکتا ہے کہ آیا آپ کو اس کیفیت کا خطرہ ہے۔ اپنے لیے اس فارم کو مکمل کرنے کے لیے تھوڑا وقت نکالیں (یا اپنے کسی عزیز کے لیے اس فارم کو مکمل کریں)۔ پھر اپنے ڈاکٹر سے خود کو درپیش DVT کے خطرے اور اس کے بارے میں ضرور بات کریں کہ آپ اس کے خلاف تحفظ کے لیے کیا کر سکتے ہیں۔ آپ کے ڈاکٹر ائندہ حوالے کے لیے آپ کی فائل میں اس کی ایک کاپی رکھنا چاہ سکتے ہیں۔

لاگو ہونے والے یا منحصر ذیل ہر ایک بیان کے لیے 2 پوائنٹس جمع کریں:

61-74 سال کی عمر

حالیہ اور پچھلے مہلک سرطان جلد کے سرطان جن میں مولونوما شامل ہے مگر جلد کا کینسر شامل نہیں

منصوبہ بند بڑی سرجری جو 45 منٹ سے زیادہ طویل ہو (بشمول ایپنڈیکٹومی اور آرٹھروسکوپک)

ہٹایا نہ جاسکے والا پلاسٹک کاسٹ یا مولڈ جس نے پچھلے مہینے کے دوران آپ کی ٹانگوں کو حرکت سے روک رکھا ہو

پچھلے مہینے کے دوران گردن یا سینے کی رگ میں ٹیوب لگایا جانا جو خون یا دوا کو براہ راست دل میں بھیجتی ہو مرکزی رگ ک رسائی، PICC لائن، یا پورٹ بھی کہا جاتا ہے

72 گھنٹے یا زیادہ وقت سے بستر تک محدود ہوں

لاگو ہونے والے یا منحصر ہر ایک بیان کے لیے 3 پوائنٹس جمع کریں:

75 سال یا زائد عمر کے ہیں

انجماد خون کی سرگزشت، یا تو اندرونی رگ میں انجماد خون DVT یا پلمونری امبولزم PE

خون کے جمنے کی خاندانی بیماری

خون کے جمنے والے عناصر کی ذاتی یا خاندانی بیماری

حالیہ یا پچھلے مہینے کے دوران لاگو ہونے والے یا منحصر ہر ایک بیان کے لیے 5 پوائنٹس جمع کریں:

کولبے / گھٹنے کو تبدیل کرنے کی انتخابی elective سرجری

ٹوٹے ہوئے کولبے، پیریا ٹانگیں

سنگین حادثہ مثال کے طور پر، گرنے یا کار حادثے کے سبب متعدد ہڈیوں کا ٹوٹنا

حرام مغز یا کمر کی چوٹ جس کے نتیجے میں فالج ہوا ہو

اسٹروک/ فالج کا سامنا

اپنے کل DVT خطرے کا اسکور حاصل کرنے کے لیے اپنے تمام پوائنٹس کو جمع کریں

ہدایات:

1. ان تمام باتوں/ وجوہات پر نشان لگائیں جو آپ پر لاگو ہوتے ہیں:

2. اپنے ہر نشان زد بیان کے لیے پوائنٹس کی تعداد کو دائیں جانب والی جگہ میں لکھیں۔

3. اپنے کل DVT خطرے کے اسکور پر پہنچنے کے لیے اپنے تمام پوائنٹس کو جمع کریں۔

پھر، اپنے ڈاکٹر کے ساتھ اپنے مکمل کردہ فارم کا مشورہ کریں۔

حالیہ یا پچھلے مہینے کے دوران لاگو ہونے والے یا منحصر ہر ایک بیان کے لیے 1 پوائنٹ جمع کریں:

41-60 عمر

معمولی سرجری (45 منٹ سے کم) کا منصوبہ

پچھلے مہینے کے دوران بڑی سرجری 45 منٹ سے طویل

نظر اربی پھولی ہوئی رگیں

سوجی ہوئی آنت کے مرض (IBD) (مثال کے طور پر، کروہن کا مرض یا الیرائٹس کولائٹس)

ٹانگوں میں سوجن (موجودہ)

حد سے زیادہ وزن یا موٹاپا (قد اور عمر کی نسبت سے وزن یا موٹاپا 25 سے زیادہ)

دل کا دورہ

دل کی ناکامی/ دل کی کمزوری کی بیماری

شدید انفیکشن (مثال کے طور پر، نمونیا)

پھیپھڑے کا مرض (مثال کے طور پر، امپھیسیما یا COPD)

بستری آرام پر ہیں یا حرکت محدود ہے یا 72 گھنٹوں سے کم وقت کے لیے ہٹایا جا سکتے والا ٹانگوں کا پریس

خطرات کے دیگر عوامل (ہر ایک کے لیے 1 پوائنٹ) \*\*\*

\*\*\*خطرے کے اضافی عوامل جن کو خون کے جمنے سے وابستہ دکھایا گیا ہے جن میں 40 سے زیادہ BMI سگریٹ نوشی ذیابیطس جس کے لئے انسولین کی ضرورت ہو کیومیٹریابی خون کا چڑھنا اور 2 گھنٹے سے طویل سرجری شامل ہے

صرف خواتین کے لیے: لاگو ہونے والے ہر ایک بیان کے لیے 1 پوائنٹ جوڑیں:

حمل روکنے کی دوائی والے علاج (HRT) کا حالیہ استعمال

حاملہ ہیں یا پچھلے مہینے کے دوران آپ کے یہاں پیدائش ہوئی ہے

مردہ ولادت جس کی کوئی واضح وجہ نہ ہو، بار بار حمل کا گرنا (3 بار سے زیادہ)، وقت سے پہلے بچے کی پیدائش مع ٹاکسیمیما یا نشوونما کی تحدید والا بچہ

## Appendix C Content Validity Index Survey in Urdu for Experts

	1	2	3	4
	غیر متعلقہ	کچھ متعلقہ	کافی متعلقہ	انتہائی متعلقہ
41-60 عمر				
معمولی سرجری ( 45 منٹ سے کم) کا منصوبہ				
پچھلے مہینے کے دوران بڑی سرجری 45 منٹ سے طویل				
نظر آ رہی پھولی ہوئی رگیں				
سوجی ہوئی آنت کے مرض ( IBD ) (مثال کے طور پر،				
کروہن کا مرض یا السرانٹس کولائٹس)				
ٹانگوں میں سوجن (موجودہ)				
حد سے زیادہ وزن یا موٹاپا (قد اور عمر کی نسبت سے وزن یا				
موٹاپا 25 سے زیادہ)				
دل کا دورہ				
دل کی ناکامی/ دل کی کمزوری کی بیماری				
شدید انفیکشن (مثال کے طور پر، نمونیا)				
پھیپھڑے کا مرض (مثال کے طور پر، امپھیسیما یا COPD)				
بستری آرام پر ہیں یا حرکت محدود ہے یا 72 گھنٹوں سے				
کم وقت کے لیے ہٹایا جا سکے والا ٹانگوں کا بریس				
خطرات کے دیگر عوامل (ہر ایک کے لیے 1 پوائنٹ) ***				
*** خطرے کے اضافی عوامل جن کو خون کے جمنے سے وابستہ دکھایا گیا ہے جن میں 40 سے زیادہ BMI سگریٹ نوشی ذیابیطس جس کے لئے انسولین کی ضرورت ہو کیموتھیراپی خون کا چڑھنا اور 2 گھنٹے سے طویل سرجری شامل ہے				

	1	2	3	4
	غیر متعلقہ	کچھ متعلقہ	کافی متعلقہ	انتہائی متعلقہ
حمل روکنے کی دوائی والے علاج ( HRT ) کا حالیہ استعمال				
حاملہ ہیں یا پچھلے مہینے کے دوران آپ کے یہاں پیدائش ہوئی				
ہے				
مردہ ولادت جس کی کوئی واضح وجہ نہ ہو، بار بار حمل کا				
گرنا ( 3 بار سے زیادہ) ، وقت سے پہلے بچے کی پیدائش مع				
ٹاکسیمیا یا نشوونما کی تحدید والا بچہ				

## CONTENT VALIDITY INDEX

	1	2	3	4
	غیر متعلقہ	کچھ متعلقہ	کافی متعلقہ	انتہائی متعلقہ
74-61 سال کی عم				
حالیہ اور پچھلے مہلک سرطان جلد کے سرطان جن میں میلونوما شامل ہے مگر جلد کا کینسر شامل نہیں				
منصوبہ بند بڑی سرجری جو 45 منٹ سے زیادہ طویل ہو (بشمول لیپروسکوپک اور آرتھروسکوپک)				
ہٹایا نہ جاسکنے والا پلاسٹک کاسٹ یا مولڈ جس نے پچھلے مہینے کے دوران آپ کی ٹانگوں کو حرکت سے روک رکھا ہو				
پچھلے مہینے کے دوران گردن یا سینے کی رگ میں ٹیوب لگایا جانا جو خون یا دوا کو براہ راست دل میں بھیجتی ہو مرکزی رگ ک رسائی، PICC لائن، یا پورٹ بھی کہا جاتا ہے				
72 گھنٹے یا زیادہ وقت سے بستر تک محدود ہوں				

	غیر متعلقہ	کچھ متعلقہ	کافی متعلقہ	انتہائی متعلقہ
75 سال یا زائد عمر کے ہیں				
انجماد خون کی سرگزشت، یا تو اندرونی رگ میں انجماد خون DVT یا پلمونری امبولزم PE				
خون کے جمنے کی خاندانی بیماری				
خون کے جمنے والے عناصر کی ذاتی یا خاندانی بیماری				
کولہے/گھٹنے کو تبدیل کرنے کی انتخابی elective سرجری ٹوٹے ہوئے کولہے، پیریا ٹانگیں				
سنگین حادثہ مثال کے طور پر، گرنے یا کار حادثے کے سبب متعدد ہڈیوں کا ٹوٹنا				
حرام مغز یا کمر کی چوٹ جس کے نتیجے میں فالج ہوا ہو اسٹروک/ فالج کا سامنا				

