A Scoping Review on the Application of Home Care Network Support Services for Patients with Urostomy and Their Caregivers

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Abstract: *Objective*: This scoping review aims to summarize research on the application of network support for patients with urostomy due to bladder cancer and their caregivers, providing references for establishing a networked care system tailored to China's national conditions. *Methods*: A systematic search was conducted across databases, including Web of Science, PubMed, the Cochrane Library, Embase, OVID, CNKI, Wanfang Database, and the China Biology Medicine Disc (CBM), using a combination of free-text terms and subject headings. The search covered the period from the inception of each database to August 6, 2025, with subsequent summary and analysis of the retrieved data. *Results*: A total of 13 studies were included. Network support platforms encompassed mobile applications, telemedicine platforms, online video conferencing tools, and cloud-based follow-up systems. The core functionalities included educational consultation and information sharing, psychosocial support, complication management, follow-up and interactive support, and electronic health record management. Evaluation metrics comprised quality of life, psychological well-being, self-management abilities, complication control, and care satisfaction. *Conclusion*: Network support models based on diverse platforms can effectively enhance the quality of home care and health outcomes for patients with urostomy and their caregivers, demonstrating feasibility and potential for widespread adoption. Future efforts should focus on optimizing personalized intervention designs, improving technological accessibility, and refining policy support systems to facilitate the establishment of an integrated hospital-home-community transitional care network.

Keywords: Urostomy; Caregivers; Home care; Network support; Scoping review

1. Introduction

Bladder cancer is one of the most common malignant tumors in the urogenital system. According to 2022 statistics from the International Agency for Research on Cancer (IARC), there were approximately 614,000 new cases of bladder cancer worldwide, ranking it 10th among all malignant tumors. In the same year, there were approximately

221,000 deaths, ranking it 13th [1]. This disease significantly impacts patients' quality of life, particularly for those undergoing radical cystectomy combined with urinary diversion, as the physiological and lifestyle changes brought about by urinary stomas are notably pronounced [2]. With the promotion of the Enhanced Recovery After Surgery (ERAS) concept, shorter hospital stays and early discharge have become trends [3]. However, most patients have limited self-management abilities and face multiple challenges after discharge, including declining physical function, difficulties in psychological adjustment, reduced social participation, and increased long-term care needs [4–7]. In recent years, internet-based and mobile healthcare technology-supported services have gradually been applied in the home management of patients with urinary stomas [8]. These services effectively overcome the spatial and temporal limitations of traditional healthcare by utilizing online health education, remote professional follow-up, and social media peer support, providing continuous and convenient care support to patients. However, this field is still in its early stages of development, with a scarcity of practical guidance resources. Relevant studies vary significantly in terms of service content, implementation models, and effectiveness evaluation, lacking a systematic review [9]. Therefore, to comprehensively understand the research status and development trends of internet-based support services in home care for patients with urinary stomas, this study intends to employ a scoping review method to systematically search and review existing literature, identify key research themes, service types, and effectiveness evaluation indicators, aiming to provide theoretical references for constructing a home-based internet support system for urinary stomas tailored to China's national conditions. In terms of method selection, given the broad research themes, diverse intervention measures, and the absence of a complete evidence system in this field, the scoping review method is suitable for systematically reviewing existing studies and identifying knowledge gaps.

2. Results

2.1. Literature screening results

This study initially identified 3,938 articles. After an initial screening by reading titles and abstracts, 3,281 articles were selected. Following a full-text review, 117 articles were further screened. A total of 104 articles were excluded due to mismatched study types, unavailability of full texts, or irrelevant research content, ultimately resulting in the inclusion of 13 articles (**Figure 1**).
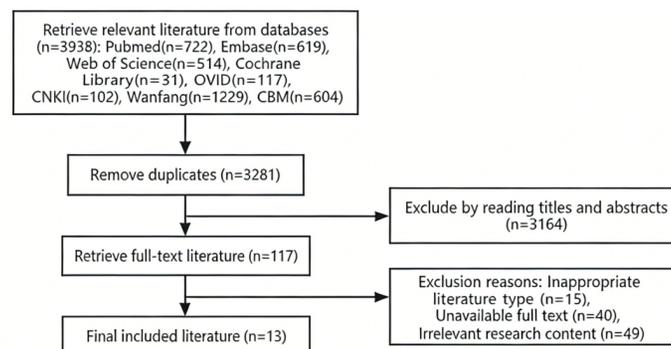

Figure 1. Flowchart of literature screening

2.2. Basic characteristics of included literature

There are 7 Chinese articles and 6 English articles [10–22]. Among them, 9 articles are randomized controlled trials, 1 article is a quasi-experimental study, 1 article is a descriptive study, 1 article is a qualitative study, and 1 article is a retrospective cohort study [10–22]. The basic information of the included literature is presented in **Table 1**.

Table 1. Basic information of included literature (n=13)

Author	Year	Country	Study Design	Sample Size (Intervention/ Control)	Study Population	Intervention Setting	Service Model	Core Components			Research Content	Evaluation Metrics
								Technical Platform	Core Function	User Needs		
Wan Xiaoqiong et al. [10]	2022	China	RCT	90 (45/45)	Ostomy Patients	Home	Remote Nursing Follow-up Model	WeChat, Telephone	(1), (2), (3)b	A, B, C, E	o investigate the effect of 5E remote follow-up in the continuity of care for urostomy patients	(1)D, (3)E, (4)E, (5)D
Chang Shan et al. [11]	2020	China	RCT	84 (42/42)	Ostomy Patients	Home	APP-Based Continuity of Care Model	APP Client	(1), (3)b, (5)b	A, C, E	To explore the effect of an APP in the continuity of care for postoperative ostomy patients	(1), (3)E, (4)E
Yuan Yuan et al. [12]	2019	China	RCT	76 (40/36)	Ostomy Patients	Home	"Internet+" Continuity of Care Model	"Cloud Follow-up" APP	(4)b, (5)a, (6)a, (8)b	A, C, D	To compare the effects of traditional follow-up versus APP follow-up	(1)A, (2)C, (4)E, (8)
Zheng Lili et al. [13]	2016	China	RCT	61 (30/31)	Ostomy Patients	Hospital, Home	Informatized Continuity of Care Model	Telephone, WeChat	(1)a, (2), (3)b, (4)a, (5)	A, B, C	To explore the impact of continuity of care on the lives of ostomy patients	(1)D, (4)E
Li Jing et al. [14]	2019	China	RCT	120 (60/60)	Ostomy Patients	Home	Family-Centered Care Model	Telephone	(1)b, (2)a, (3)a	A, C, D	The effect of a family-centered care model on patients' quality of life	(1)C, (2)B, (4)E
Rock et al. [15]	2022	America	RCT	167 (89/78)	Ostomy Patients	Home	OSMT Remote Care Model	Zoom Video Communication Platform	(1), (2), (7)a	A, B, G	To compare telehealth versus usual care on resource use and self-care	(3)D, (5)E, (6)A
Xu et al. [16]	2023	America	RCT	23 (16/7), (Total 46 incl. caregivers)	Patients & Caregivers	Home	PRISMS Remote Care Model	eHealth Platform, Telephone, Online Questionnaire	(1), (3)b, (6)b, (6)c, (7)b	A, C, G	To evaluate the feasibility, usability, acceptability, and preliminary efficacy of the PRISMS program	(1), (4)A, (4)B, (5)B
Fan et al. [17]	2022	China	RCT	80 (40/40)	Caregivers	Hospital, Home	"Internet + Health Education" (IPHE) Model	WeChat, Email, Baidu Cloud, Online Questionnaire	(1), (2), (3)b	C, E	To compare the effects of IPHE versus routine care on caregivers	(2)D, (4)C, (4)E, (5)C
Virginia Sun et al. [18]	2018	America	RCT	162	Patients & Caregivers	Home	OSMT Remote Care Model	Zoom Video Communication Platform, Online Questionnaire	(1), (2), (3)b	A, D, E, F	To enhance self-efficacy and quality of life through telehealth conferences	(1)B, (2)A, (3)A, (3)B, (3)C, (4)D
Ni Chen et al. [19]	2021	China	Retrospective Cohort Study	32 (17/15)	Urostomy Patients	Home	"Internet + Nursing Medical Service" Model	"Internet + Continuity of Care" APP	(1), (3)b, (5)b	C, D, E	To evaluate the effect of internet-based nursing in urostomy patients	(2)E, (3)E, (4)E

Table 1 (Continued)

Author	Year	Country	Study Design	Sample Size (Intervention/Control)	Study Population	Intervention Setting	Core Components				Research Content	Evaluation Metrics
							Service Model	Technical Platform	Core Function	User Needs		
Liu Shuang et al. [20]	2024	China	Quasi-experimental Study	63	Ostomy Patients	Home	"Internet + Nursing Service" Model	"Hui Nursing" APP	(3)c, (4)c, (6)d	F	To assess patient satisfaction and safety after application	(5)A, (4)F
Pittman et al. [21]	2017	America	Descriptive Study	202	Ostomy Patients	Hospital, Home	Patient Online Support Needs Model	YouTube, UOAA Website, etc.	(1)c, (2)b, (8)a	B, D	To assess the quality, accessibility, and patient use of online resources	(5)D, (6)B, (7)A, (7)B
Zeng et al. [22]	2024	America	Qualitative Study	17	Ostomy Patients	Hospital, Home	Remote Interview Model	Telephone, Email, Zoom	(1), (2)b	A, B, C	To assess gaps in patient education needs and propose improvements through group discussions	(9)

Note: (1) Core Functions: (1) Educational Consultation and Information Sharing (a. Health Education, b. Nursing Knowledge Dissemination, c. Information Provision); (2) Psychosocial Support (a. Psychological Support, b. Support Groups); (3) Complication Management (a. Complication Prevention, b. Complication Monitoring, c. Complication Treatment); (4) Follow-up and Interactive Support (a. Follow-up Guidance, b. Follow-up Interaction, c. Home Service Appointment); (5) Electronic Record Management (a. Electronic Records, b. Electronic Monitoring Records); (6) Personalized Professional Support (a. Expert Consultation, b. Personalized Feedback, c. Professional Support, d. Ostomy Care Guidance); (7) Resource and Community Support (a. Resource Access, b. Peer Support Forums); (8) Assessment and Research (a. Content Assessment, b. Questionnaire Survey). (2) User Needs: A. Improve quality of life and adapt to life; B. Acquire knowledge and skills; C. Prevent and manage complications; D. Obtain psychological and emotional support and adjustment; E. Enhance self-management ability and reduce burden; F. Access convenient and professional support services; G. Optimize the utilization of medical resources. (3) Evaluation Indicators: (1) Quality of Life (A. World Health Organization Quality of Life Assessment Scale, B. City of Hope Quality of Life Scale - Colorectal Version, C. SF-36 Quality of Life Scale, D. Quality of Life Score); (2) Psychological and Emotional Well-being and Adaptation (A. Hospital Anxiety and Depression Scale, B. SDS and SAS Scores, C. Medical Coping Modes Questionnaire, D. SCSQ Coping Mode Score, E. SIS Scale); (3) Knowledge, Self-management, and Behavior (A. Ostomy Knowledge Questionnaire, B. Patient Activation Measure, C. Ostomy Self-management Behavior Self-efficacy Scale, D. Self-care Frequency, E. ESCA Scale); (4) Symptoms, Burden, and Complications (A. Symptom Severity (PROMIS), B. Caregiver Burden, C. ZBI Burden Score, D. Ostomy Care Burden Scale, E. Incidence of Complications, F. Incidence of Adverse Events); (5) Satisfaction and Experience (A. Patient Satisfaction, B. Nursing Satisfaction, C. FCSS Satisfaction, D. Satisfaction, E. Qualitative Feedback); (6) Service Utilization and Engagement (A. Resource Utilization, B. Usage Frequency); (7) System Usability and Technology (A. Content Score, B. Usability Score); (8) Social Impact Scale; (9) Qualitative Themes.

2.3. Application of home-based care network support services in patients with urinary diversion

2.3.1. Carriers and forms of network support

Based on the analysis of the 13 included studies, network support for home-based care of patients with urinary diversion is primarily achieved through diverse information technology carriers and service models. Common carriers include WeChat, telephone calls, APP clients, the Zoom video conferencing platform, eHealth integrated health platforms, and email, among others [10–13, 15–20, 22]. In terms of application models, domestic studies often adopt forms such as "Internet + Health Education", "Internet + Continuing Nursing", and "Cloud Follow-up", generally utilizing WeChat or dedicated APPs to achieve functions such as health education, online follow-up, and information feedback [10–14, 19–20]. In contrast, foreign studies tend to prefer remote medical platforms like Zoom and eHealth to support real-time audio-video interaction and collaborative care involving multiple participants [15–18, 21–22]. Further analysis indicates that different technology carriers, due to their functional characteristics, are more suitable for specific support purposes. For example, functionally integrated apps are more suitable for long-term, systematic data tracking and personalized management, while video conferencing platforms (such as Zoom), with their high interactivity, are more suitable for interactive scenarios requiring real-time communication, such as peer support and group education. Overall, the service setting is primarily the home environment, with some studies also attempting to incorporate the continuity of hospital and home settings into the scope of support.

2.3.2. Core functions and applications of network support in home-based care for urinary diversion

Among the 13 included studies, the core functions of network support in home-based care for urinary diversion include educational consultation and information sharing, psychosocial support, complication management, follow-up and interactive support, and electronic record management. In educational consultation and information sharing, Wan Xiaoqiong et al. provided pre-discharge and post-discharge health education to patients with bladder cancer and urinary diversion through the WeChat platform [10]; Zeng et al. assessed patients' educational needs through focus groups and provided personalized health knowledge guidance using online platforms based on patient feedback [22]. In psychosocial support, Zheng Lili et al. provided emotional support to discharged patients through telephone follow-up and the establishment of WeChat communication groups [13]; Rock et al. provided educational, psychological, and social support to patients through online group meetings conducted via Zoom [15]. In complication management, Chang Shan et al. effectively reduced the incidence of complications such as stoma dermatitis and urine leakage by applying app clients to the continuing care of stoma patients [11]; Xu et al. used the PRISMS program to manage early symptoms in patients and their families, effectively reducing the risk of emergency visits and readmissions due to complications [16]; Li Jing et al. significantly reduced the incidence of complications in postoperative patients with urinary diversion by implementing a family-centered care model that systematically strengthened the family support network [14]. In follow-up and interactive support, Liu Shuang et al. achieved real-time appointment scheduling, remote interaction, and digital follow-up for stoma patients through the app platform, effectively improving follow-up efficiency and patient satisfaction [20]. In electronic record management, Yuan Yuan et al. achieved digital integration and automatic updating of patient information through the "Cloud Follow-up" app [12]; Ni Chen et al. integrated patients' full-cycle health data through the app platform, enabling dynamic updates and structured categorization, providing precise and systematic information support for

continuing care for urinary diversion [19].

2.3.3. Evaluation indicators of network support

Through the analysis of the included studies, the evaluation indicators of the effectiveness of network support can be systematically summarized into the following three levels: Patient Level: This level focuses on the direct effects of network support on patients' own health status and behaviors, and is the core of current research. It mainly includes: (1) Quality of life, often assessed using generic or disease-specific scales, is a key indicator for measuring the overall effectiveness of interventions [10, 14–15]; (2) Psychological state, often quantitatively evaluated using tools such as the Hospital Anxiety and Depression Scale (HADS), the Self-Rating Depression Scale (SDS), and the Self-Rating Anxiety Scale (SAS) [12, 14, 18]; (3) Self-management ability, specifically reflected in aspects such as disease knowledge mastery, self-efficacy level, and self-care behaviors [12, 19]; (4) Complication control, measured using standardized indicators such as the incidence of complications, patient symptom burden, and severity [13, 16–17]. Caregiver Level: This level examines the impact of network support on primary family caregivers. The evaluation content focuses on: (1) Caregiving burden and readiness, namely the physical and mental stress of caregivers and the adequacy of their preparations for providing care; (2) Caregiving knowledge and skills, reflecting the improvement in caregivers' caregiving abilities obtained through interventions. Existing research has relatively less focus on this level, which is an area that can be further explored in future studies. Technology Level: This level focuses on evaluating the quality of network support services themselves and user experience, which is an important dimension for ensuring the sustainability of services. The main evaluation indicator is nursing satisfaction, namely the subjective evaluation by patients and caregivers of the service's usability, convenience, and acceptability, often used as a key indicator for evaluating health services [20–21].

3. Discussion

3.1. Innovative development of network support models based on diverse carriers

With the rapid advancement of information technology, network support models have demonstrated innovation and diversity in the healthcare sector, particularly in chronic disease management and postoperative rehabilitation [23]. This study, through a comprehensive review of multiple literatures, reveals that network support models have expanded from traditional telephone follow-ups to diverse carrier platforms, including mobile applications, telemedicine platforms, online video conferencing tools, and cloud-based follow-up systems. For instance, the "Cloud Follow-up" app mentioned by Yuan Yuan integrates internet technology to enable electronic management of patient health records and real-time dynamic monitoring, breaking through the spatial and temporal constraints of traditional follow-ups [12]. Chang Shan and Fan further demonstrated the application of app clients and the Internet + health education model, enhancing information accessibility and engagement through the dissemination of ostomy care knowledge, video demonstrations, and interactive communication [11, 17]. The Ostomy Self-Management Training (OSMT) program in Rock leverages internet technology to conduct group sessions via video conferencing, integrating professional nurses and peer support, reflecting the innovation of carrier diversity [15]. These carriers not only provide educational content but also incorporate self-management tools, synchronization of smart device data, and personalized feedback mechanisms, thereby enhancing the specificity and sustainability of interventions. The collaborative use of diverse carriers, such as the multiple ostomy care websites evaluated by Pittman (e.g., manufacturer websites and patient support organization websites), demonstrates

the potential of network support models in resource integration and user customization, providing a practical foundation for innovation [21].

3.2. Examination of core functions and effects of home-based health network support

Synergistic Outcomes and Practical Limitations: The core functions of the home-based health network support focus on education, skill training, monitoring, feedback, and social support. Multiple studies confirm the synergistic effects of these functions in improving patient outcomes. For example, Wan Xiaoqiong significantly improved the self-care knowledge awareness rate, self-care ability, and quality of life scores of urinary ostomy patients through a remote nursing model based on 5E teaching [10]. Fan demonstrated that the Internet + health education model effectively reduced the caregiving burden and stress of caregivers while improving nursing skills and patient quality of life [17]. Synergistic outcomes are also reflected in economic efficiency and accessibility, as Xu and Pittman reported reductions in complication rates and readmission rates, thereby alleviating the burden on the healthcare system [16, 21]. However, network support models also face practical limitations. The promotion and application of telemedicine interventions primarily encounter four challenges. Firstly, issues of technology and the digital divide limit service accessibility, with elderly and low-income groups often unable to obtain effective coverage due to a lack of smart devices and network support; simultaneously, the quality of existing ostomy care network resources varies, with some websites suffering from incomplete information or complex operations, affecting user experience [21]. Secondly, user adherence and sustained participation pose challenges, with studies indicating that although the initial usage rate of the PRISMS program is high, the proportion of users who persist in using relevant smart devices long-term significantly decreases, reflecting difficulties in maintaining participation and highlighting the necessity for continuous incentive mechanisms [16]. Thirdly, intervention effects are significantly influenced by individual differences and socio-cultural factors, with the absence of caregiver support directly impacting rehabilitation outcomes, while factors such as age, education level, health literacy, and cultural background also constrain patients' acceptance and participation in intervention content. Finally, network security and information privacy issues remain potential obstacles, and although HIPAA-compliant platforms are currently used as a foundational safeguard, further technological protection and policy support are needed during widespread promotion to establish a sustainable trust mechanism [18].

3.3. Implications for future research and practice

The existing research on network support for home-based care after urinary diversion surgery for bladder cancer is limited, including quasi-experimental studies, RCTs, descriptive studies, qualitative studies, and retrospective cohort studies, with sample sizes ranging from 17 to 202 cases and intervention durations from 5 weeks to 12 months, indicating small sample sizes and short intervention periods, with an overall need to improve research quality. Future research should focus on the following aspects: Firstly, in terms of research methodology, sample sizes should be expanded, and intervention and follow-up periods should be prolonged to enhance the reliability and generalizability of results. In terms of intervention strategies, personalized development should be promoted, leveraging big data and artificial intelligence technologies to accurately identify patient needs and achieve customized content delivery, thereby improving the specificity and effectiveness of interventions. Meanwhile, long-term follow-up is crucial for evaluating the sustainability of intervention effects and the long-term benefits of complication prevention. Secondly, at the technological application level, efforts should be made to reduce usage barriers by optimizing device support and strengthening skill training, effectively alleviating the digital divide

issue among different groups. In content design, comprehensive education for patients and their caregivers should be emphasized, with a focus on the systematic cultivation of self-management abilities and the enhancement of participation, adherence, and behavioral change effects through interactive learning methods. In terms of policy support, the inclusion of remote nursing services in medical insurance has a certain policy foundation and local pilot experience, and future efforts should be dedicated to establishing national uniform service standards and reimbursement norms, completing supporting policy systems, and providing institutional guarantees for its large-scale promotion [24]. At the practical level, network support models should be systematically integrated into routine nursing processes, becoming a standard component of discharge planning and continuity of care. Healthcare institutions need to strengthen the technological application training of nursing staff and construct a multidisciplinary collaborative network encompassing doctors, nurses, patient family members, and community resources to ensure the consistency of information transmission and the continuity of nursing support [25]. In conclusion, network support models have the potential to transform home-based care models after urinary diversion surgery for bladder cancer, but the realization of their comprehensive benefits still relies on higher-quality research validation and more systematic clinical practice optimization.

4. Summary

The internet-based support model built on diverse information carriers effectively overcomes the temporal and spatial limitations of traditional nursing care, enhancing the continuity and accessibility of home-based care. It improves patients' self-management abilities, psychological adaptation levels, and quality of life, while also reducing the burden on caregivers and increasing nursing satisfaction. However, current research still has certain limitations, such as generally small sample sizes, short intervention periods, insufficient follow-up depth, and challenges in service accessibility, technology usage compliance, and information security assurance. Future research should incorporate the actual needs of elderly patients and their caregivers to further develop intelligent and personalized internet-based support solutions based on artificial intelligence and big data technologies. The long-term effectiveness and scalability of these solutions should be validated through multi-center, large-sample, and long-term follow-up studies. Additionally, multidisciplinary collaboration and policy support should be strengthened to systematically integrate internet-based support into the continuum of care processes and establish an integrated hospital-home-community support service system.

Disclosure statement

The authors declare no conflict of interest.

References

[1]   Ferlay J, Ervik M, Lam F, et al., 2024, Global Cancer Observatory: Cancer Today. International Agency for Research on Cancer. https://gco.iarc.who.int/today

[2]   Zhang T, Qi X, 2023, Enhanced Nursing Care for Improving the Self-Efficacy & Health-Related Quality of Life in Patients with a Urostomy. Journal of Multidisciplinary Healthcare, 2023(16): 297–308.

[3]   Zhang J, Cao XX, Wang XJ, et al., 2025, Preliminary Application of the Super-enhanced Recovery after Surgery Management Model in Patients Undergoing Colorectal Cancer Surgery. Chinese Nursing Management, 25(6): 884–889.

[4] Zhao Q, Gao JP, Gao KX, et al., 2024, Analysis of the Current Status and Influencing Factors of Physical Resilience in Elderly Patients with Bladder Cancer and Urinary Stomas. Military Nursing, 41(9): 21–24.

[5] Ju HJ, Yin AC, Liu W, 2021, Research Progress on Negative Psychological States and Nursing Care in Patients with Urinary Stomas. Nursing Practice and Research, 18(18): 2717–2720.

[6] Yu HX, Gong YL, Huang W, et al., 2023, Analysis of the Current Status and Influencing Factors of Social Alienation in Patients with Urinary Stomas after Radical Cystectomy for Bladder Cancer. Practical Clinical Medicine (Jiangxi), 24(6): 109–114.

[7] Liu QQ, Tian L, Tian J, et al., 2021, Research on the Caregiving Ability and Influencing Factors of Caregivers for Patients with Urinary Stomas. Journal of Nursing Administration, 21(6): 397–401.

[8] Xie YQ, Jiang H, Ji XB, et al., 2023, Advances in the Application of Mobile Health Technology in the Management of Patients with Urinary Stomas. Nursing Research, 37(18): 3348–3351.

[9] Page MJ, McKenzie JE, Bossuyt PM, et al., 2021, The PRISMA 2020 Statement: an Updated Guideline for Reporting Systematic Reviews. BMJ, 2021(372): n71.

[10] Wan XQ, Lan H, Zhang YY, et al., 2022, Application Effect of a Remote Nursing Follow-up Model Based on 5E Teaching in the Continuity of Care for Patients with Bladder Cancer and Urinary Stomas. Clinical Research and Practice, 7(19): 161–163.

[11] Chang S, 2020, Application Effect of an App Client in the Continuity of Care for Patients with Urinary Stomas after Bladder Cancer Surgery. Journal of Chronic Diseases, 21(11): 1739–1741.

[12] Yuan Y, Cheng JX, Chen QQ, et al., 2019, Application of "Internet+"-based Continuity of Care Services in the Post-discharge Follow-up of Patients with Urinary Stomas. Nursing and Rehabilitation, 18(12): 67–72.

[13] Zheng LL, Song YY, Song JL, et al., 2016, Impact of Continuity of Care on the Quality of Life of Patients with Urinary Stomas. Chinese Journal of Modern Nursing, 22(27): 3954–3957.

[14] Li J, Li HR, Ren CQ, 2019, Impact of a Family-centered Nursing Model on the Quality of Life of Patients with Urinary Stomas after Bladder Cancer Surgery. Guizhou Medical Journal, 43(6): 989–990.

[15] Rock MC, Cidav Z, Sun V, et al., 2023, Adapting to the Burdens of Care: A Telehealth Program for Cancer Survivors with Ostomies. Supportive Care in Cancer, 31(1): 15.

[16] Xu S, Tan X, Ma C, et al., 2023, An eHealth Symptom and Complication Management Program for Cancer Patients with Newly Created Ostomies and their caregivers (Alliance): A Pilot Feasibility Randomized Trial. BMC Cancer, 23(1): 532.

[17] Fan XF, Li HY, Lai LY, et al., 2022, Impact of Internet Plus Health Education on Urinary Stoma Caregivers in Coping with Care Burden and Stress in the Era of COVID-19. Frontiers in Psychology, 2022(13): 982634.

[18] Sun V, Ercolano E, McCorkle R, et al., 2018, Ostomy Telehealth for Cancer Survivors: Design of the Ostomy Self-management Training (OSMT) Randomized Trial. Contemporary Clinical Trials, 2018(64): 167–172.

[19] Ni C, 2022, Evaluation of the Application Effect of "Internet + Nursing and Medical Services" in the Continuity of Care for Patients with Urinary Stomas. Chinese Science and Technology Periodical Database (Full-Text Edition) Medicine and Health, 2022(1): 88–90.

[20] Liu S, Lu M, 2023, Construction and Application of "Internet + Nursing Services" in Home-Based Continuity of Care for Patients with Urinary Stomas. Capital Food and Medicine, 31(12): 136–138.

[21] Pittman J, Nichols T, Rawl SM, 2017, Evaluation of Web-based Ostomy Patient Support Resources. Journal of Wound Ostomy & Continence Nursing, 2017, 44(6): 550–556.

[22] Zeng E, Saucke M, Pati B, et al., 2024, "... I Wish Someone Told Me About That...": A Qualitative Assessment of the

Educational Needs of Patients Undergoing Cystectomy. Urology, 2024(194): 348–355.

[23] Xu YL, Huang H, Cao Q, et al., 2021, A Scoping Review of the Application of Electronic Health Interventions in the Management of Chronic Diseases. Journal of Nursing Science, 36(23): 96–101.

[24] National Health Commission, 2022, Will Improve the Pricing and Medical Insurance Payment Policies for "Internet +" Medical Services. Journal of Medical Informatics, 43(2): 99.

[25] Liu JY, Liang ZL, Li XM, et al., 2025, Current Status of Health Management for Elderly Patients with Chronic Diseases in China and Path Optimization Based on a Four-Dimensional Collaboration of "Hospital-Community-Family-Individual". Journal of Integrative Nursing, 11(1): 133–138.