







About i3 Solutions

- i3 Solutions Inc is a proud 100% Canadian owned and operated company. We are a leading provider in healthcare solutions for the patient bedside terminal that is designed, built and made in Canada.
- Founded in 2005 and headquartered in Mississauga, Ontario, Canada.





















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Security

- Integrate with hospital's network architecture
- We run on segregated subnet
- Work with hospital's firewalls, content filtering and intrusion prevention, malware and virus prevention systems, or can quote an appliance (i.e. Fortigate)
- Antivirus agnostic for any antivirus with a console (i.e. Symantec, McAfee, Fortinet)
- Regular security patches 3 times a year (VHD swap technology)

Infrastructure

- We can offer a cloud hosted solution, or an on prem solution
- Architecture supports virtualization, Hyper-V
 or Vmware
- Ethernet and power are required at each bedside
- Discussion on who provides internet and IPTV is necessary (vendor management)
- Patient terminals are Windows 10 operating system
- Win10 64-bit, 8 GB Ram, i5 processor, 500 GB HD

Architecture

- IBTs work independently on the internet; they connect to local and/or cloud servers to get content lists and registrations
- Modular scalable system
- HL-7 for clinical integrations into the EMR (ie Meditech, Epic, Cerner)
- Can integrate into multiple phone systems (ie Cisco, Avaya, msVoip, NEC)

Deployment

- Provide a dedicated Project Manager with a detailed project plan
- Work with the hospital on a seamless operational transition plan to minimize downtime
- Site visit is the means to approach identifying departmental requirements

1. Medication & Identity Barcode Scanning

- Assists in patient safety for positive identification when administering medication to patients (i.e. scanning of the patient wristband with the medication and creating a match thus preventing medication errors)
- The ability to scan the wristband at the bedside and create a label for the specimens taken

2. Menu Ordering

- Cost savings and efficiencies are created by having the patient placing food orders in real time, without requiring manual intervention of dietary staff
- Empowering the patient to have full control over their meals, and the ability to self-order
- Food orders are integrated to the patient chart

3. Patient Surveys

 Provides the patient with access to surveys in real time, which will allow for immediate rectification if required (in contrast to postdischarge surveys that do not result in real time patient amelioration)

4. Patient Education

The i3 solution provides two paths of patient education;

- 1. Third party subscriptions which provide real time video health information from qualified Canadian/US vendors
- 2. This solution integrates and connects to internal hospital resource centres/materials

5. Building Automation

- i3 has successfully developed and supported building automation systems (Metasys), thus providing the ability to control lighting, room temperature, chromatic glass and blinds within the patient room. Other IP devices can also be controlled as required.
- This technology has proven to reduce falls risk for high-falls risk patients, thus reducing liability issues

6. Nurse Call Integration

• i3 Solutions has developed technologies to allow the bedside terminal to integrate to the Nurse call systems, allowing the patient to request a nurse visit or return call, directly from the terminal

7. IPTV

- i3 Solutions can offer various package plans from a basic 30 channels, up to premium packages of up to 100 channels of TV/movies, allowing the patient autonomy to select from a wide range of programming
- i3 can integrate with Rogers, Bell, Shaw, Verizon, Charter, etc.

8. Screencasting

• i3's solution uses Screencasting (projecting the TV feed to a large in room monitor) in a secure technology, over IP vs Bluetooth

9. Antivirus Protection

- i3 provides layers of security with local machine protection for advanced malware protection (Symantec/Windows defender), preventing viruses, ransomware or any vicious attacks to the corporate network
- i3 forces local machine group policy to lock all USB ports on the bedside terminal so that external devices cannot be plugged in and access the corporate network

10. VPN

 i3 strongly believes, promotes, and supports a hospital's IT security. The i3 VPN will be IP and port specific for access when servicing i3 servers and client machines

11. Radio, etc

- Accessibility to IP radio of 60+ channels to patients, giving the ability of the patient to suggest radio, podcast and audio content of their choices in various languages
- Other diverting content (Books, Games, Podcasts)

12. Interpretation Services

 i3 is able to integrate to third party services allowing real time interaction between nurse and patient/family in various languages, thus allowing for better patient care and positive outcomes

13. Internet

• Standard internet is provided, but in addition, the web module provides much more; this includes video conferencing solutions (i.e. Skype) and all popular social media outlets

14. Telephone

i3 has successfully integrated with Cisco/Avaya and other IP phone systems

15. Clinical Integration

 Panacea[™] software has the ability to be configured to access EHR/EMR (i.e. Meditech, PointClick Care, Epic, Cerner, Allscripts)

16. Hardware

- 10.5" 21.5" medical grade touchscreen with virtual or physical keyboard as per hospital's needs
- The medical grade arm is available in two lengths, to support patient comfort and room infrastructure; can be determined upon reviewing patient room requirements
- Supports a single ethernet drop, minimum 1GB port

17. The Patient Portal

• Has the ability to integrate with and access EMR's patient portal (i.e. Meditech, Epic, My Chart, etc.) if available, and keep a patient engaged in their healthcare plan

18. Infection Control

• Bedside terminals and all components are certified for Viroxx, bleach and all standard hospital grade cleaners, to support infection control practices within the patient room

19. Implementation

 i3 Solutions provides detailed project management to ensure success of the project, and that it has delivered an on time, on budget solution

20. Accessibility (AODA)

• The telephone option provides hands free speakerphone, books have audio options, and all aspects of the terminal are geared towards patient accessibility

Video Chat

Telemedicine; physician to patient, nurse to patient, & family to patient communication

Reduced risk of spreading infection between caregiver and patient

Reduced overhead cost of Personal Protective Equipment (PPE)

For Covid-19 and other infectious diseases

In-Touch Video Chat

- Allows the caregiver/patient and family to have virtual visits in real-time
- Patient can remain in the bed while communicating to the caregiver or family member – this reduces infection risk beyond the patient room
- Virtual chat session allows caregiver to see the patient without requiring PPE for room entry
- Improves patient health outcomes by access to family in situations where in person hospital visits are not permitted (ie Covid-19)

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Easy useTwo Step Video Chat Process

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Resources required and installation plan guideline Removal of Existing Equipment: Assu

- We can physically dismount old hardware
- A work/storage space is required to store until disposal
- Hospital must determine removal requirements or construction practices
- Disposal/recycling of old hardware typically the responsibility of hospital or current solution provider.

Assumptions of work to be completed by in house maintenance:

- Room prep
- Cabling (ethernet/coax/power) as needed
- Assistance/access as required to closets/cabinets
- Cooperation on construction activity

Resources required from Hospital:

- Dedicated Project Manager (PM) assigned to project
- Facilities Maintenance (FM) as needed for various construction and wiring planning
- IT representatives for networking planning
- SME's supporting any specific integration for telephony/clinical/building systems
- Hospital Management/Administration
- Cleaning crew to create clean room state at deployment
- Installation Plan Guideline (responsibility and action to be determined case by case)

Planning Stages

- Site visits with ward walkthroughs are performed to learn existing infrastructure and specific challenges
- Ward/Room lists for proposed deployment/changeover are created, determining order of changeover
- Required construction approach is determined for removal of old and installation of new
- All new services are engaged for required buildout (i.e. network bandwidth, IPTV etc.)
- Full PM plan developed including phased rollout which limits downtime between old service and new service:
 - New services are built and primed ahead of rollout schedule
 - If possible, new support construction and mounting of Wallboxes/ceiling mounts is performed ahead of rollout schedule
 - Typically removal of old equipment and installation of new service are performed as close to each
 other as possible, section by section

Deployment/Cutover Phases

- Typically Ward by Ward
- Remove old solution, mount new hardware, or if in place already, activate new hardware
- Patient onboarding to new solution (May involve matching remaining paid services with equivalent on new system depending on pay model and timing)

Post Deployment – i3 responsibility (Service level TBD)

- Managed Services component and level to be
- determined (i.e. onsite staff, hospital staff, remote support etc.)
- Monitoring and maintaining system
- Maintenance of incident/ticketing system including webportal, email, and telephone access methods

