



IT Technologies That Work in Medical Practices

Presented by: Jason Reid

Email : jason@htg.co.nz

Phone : 07 578 1093

Mobile : 0275 783 500


Rotorua GP CME 2012
General Practice Conference
& Medical Exhibition



HTG - Houston Technology Group

- Established 1 March 1986 – 26 years
- Employs 27 people and growing
- Active in Waikato, BOP, South Auckland
- Rest of NZ – nationwide partner network
- Director HTG was partner of Houston Medical



Main Business Activities

- IT Infrastructure Design, Implementation & Support
- IT Productivity Consulting

Productivity Solutions

Deploying Innovative Productivity Solutions In The Following Areas:

- Digital Pens and digital workflow solutions
- Tablets
- Speech Recognition
- Distributed Dictation Services
- Handwriting Recognition
- SharePoint
- CRM
- GIS Asset Management
- Software integration
- Managed Services including Co-location, Co-hosting and Online Data Storage
- Software Training for Improved Productivity



HTG Strategy

Technology is one of the best productivity enablers in business today giving an exceptional edge to those that adopt and invest



Capturing the information

All technologies discussed are focused on efficiently, intuitively, accurately and cost effectively capturing information in today's busy medical practice

- Speech Recognition
- Digital Pens
- Digital Ink Workflow Solutions
- Pen Computing





Speech Recognition

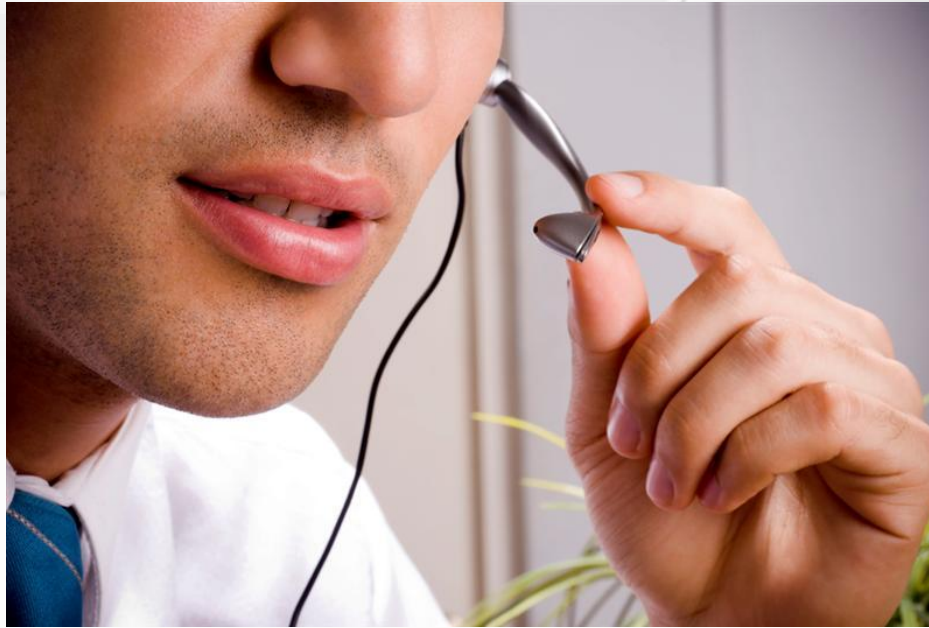


Introduction

- Speech recognition (SR) is technology that can translate spoken words into text
- Some SR systems use "training" where an individual speaker reads sections of text into the SR system
- Systems that do not use training are called "Speaker Independent" systems
- Research of this technology began in 1936
- Early 1980's when the technology reached the commercial market
- In the last couple of years accuracy levels have reached 95% and better with transcription speeds at over 160 words per minutes
- Nuance Dragon market leader



Demonstration



Speech Recognition for Healthcare

- Speech recognition drives efficiencies and cost savings in clinical documentation by turning clinician dictations into formatted documents -- automatically.
- Front-end speech recognition allows clinicians to dictate, self-edit and sign transcription-free, completed reports in one sitting – directly into a Practise Management System (PMS) or Electronic Health Record (EHR). Front-end speech recognition also allows physicians to navigate quickly from one section of the EHR to another, saving valuable time.
- Background speech recognition turns clinician dictation into speech-recognized first drafts that medical transcriptionists (MTs) edit, resulting in up to 100% gains in MT productivity when compared to traditional transcription.

Benefits

- Reduce document turnaround times
- Save on transcription costs - significantly
- Enhance patient care through increased clinical record accuracy, inclusiveness and access
- Dictate directly into the EHR with front-end speech recognition
- Accelerate EHR navigation within the EHR, saving physicians time
- Increase MT productivity with less strain
- Increase clinician satisfaction and EHR adoption
- Employ multiple dictation options including phone, dictation devices, and workstations

What Customers Say



Pricing



Dragon NaturallySpeaking 11 Premium
including Plantronics Bluetooth Headset
and NZ support
Only \$439 +GST



Dragon NaturallySpeaking 11 Home
Only \$135 +GST

*Other products include Dictaphone Enterprise Speech System,
eScription, Dragon Medical, Dragon Medical Practice Edition, Dragon
Medical Mobile & PowerScribe360*

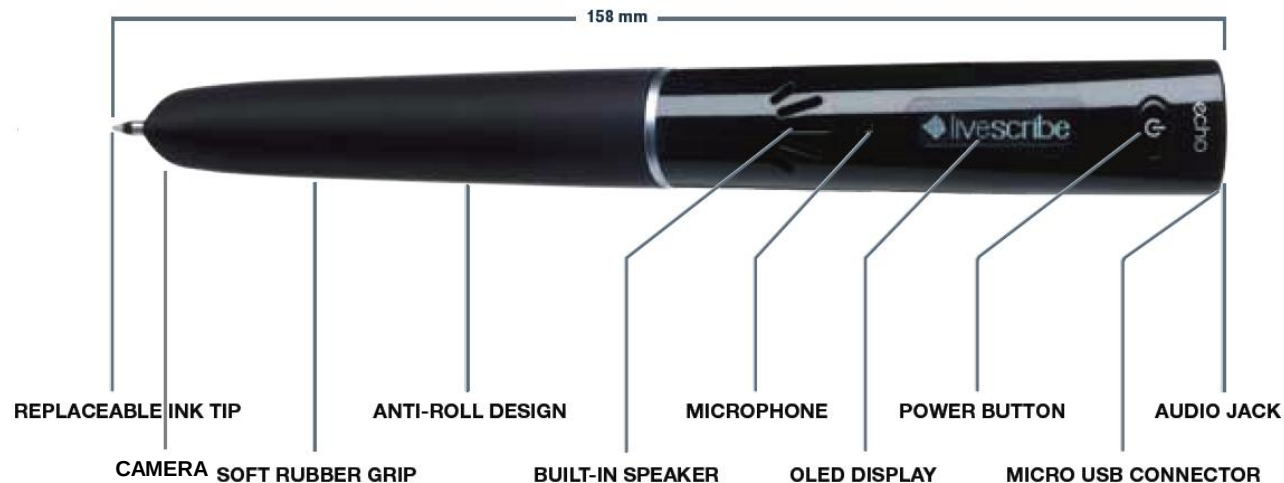


Digital Pens



Digital Pen

- Pen is mightier than the sword
- Basic human capability
- Less intimidating form of technology particularly for elderly patients
- Paper has unique dot structure or 2D co-ordinate system



LiveScribe Digital Pen



Features

Record and Play Back

Smart pen records everything you write and hear so you'll never miss a word. Replay your meetings simply by tapping on your notes.



Save, Search and Organize

LiveScribe Desktop saves your notes and recordings to your computer for fast, easy access to what's important.

Send and Share with LiveScribe Connect™

Easily send notes and audio to people and destinations such as Email,** Google™ Docs, Facebook, Evernote,® or your mobile device. All from your paper!



Demonstration



Pricing



Starter Pack incl 8Gb pen, spare ink cartridge, LiveScribe Desktop software, connecting cable and a A5 notebook costs only \$399 +GST



Livescribe Notebook A4 Single Lined 4 Colours: \$29.95 plus GST for a 4 pack



Digital Ink Workflow Solutions



Introduction

Flexible Data Capture

Write on paper with digital pens or enter data into tablets

Enrollment APPLICATION CONFIRMATION FORM (ACF)
Medicare Plan

Name of Applicant: Ken Schneider Phone No: 206 555 1212
Address: 2127 Fifth Ave
City: Seattle State: WA Zip Code: 98103

I understand that the information captured in the accompanying Enrollment Request Form will be used to enroll me in a Health Maintenance Organization (HMO) through Health Medicare Plan.

☒ Yes ☐ No

The health marketing representative explained and I understand that when I become enrolled in an HMO, I will no longer be able to use my Medicare card to see providers who are not in the health network. Instead, I must receive all healthcare services from in-network health providers, other than for emergency or urgently needed care. I do not need a referral to go to network doctors, specialists, and hospitals. In-network providers include podiatrists, ophthalmologists, chiropractors and all other specialists.

I am currently seeing the following Primary Care Provider and Specialist(s):
Primary Care Provider: Dr. Phil Cohen
Specialist(s):
☒ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No

By initiating below, I understand that if any of the providers listed above are not in the health network, I must see a different provider who is in the health network to receive care. If I choose to see a provider that is not in the health network, I understand that neither health nor Medicare will pay the bill. I also understand that I will no longer be able to continue to use my Medicare card to see providers that are not in the health network. I must use health providers and present my Health ID card when receiving care.

I further understand that if the Primary Care Provider listed above is not in the United Health network, I must choose a United health participating provider as my Primary Care Provider.

New Primary Care Provider (if applicable):
*Applicant's initials: KS

I understand that I am applying for coverage in an HMO. I have reviewed, understand and agree with the content of this form.

Signature of Applicant: Ken Schneider Date: 3/16/2011
Signature of Representative: Amber Ginde Date: 3/16/2011

Data instantly digitized, formatted, aggregated in data tables on servers

Enrollment APPLICATION CONFIRMATION FORM (ACF)
Medicare Plan

Name of Applicant: Ken Schneider Phone No: 206 555 1212
Address: 2127 Fifth Ave
City: Seattle State: WA Zip Code: 98103

I understand that the information captured in the accompanying Enrollment Request Form will be used to enroll me in a Health Maintenance Organization (HMO) through Health Medicare Plan.

☒ Yes ☐ No

The health marketing representative explained and I understand that when I become enrolled in an HMO, I will no longer be able to use my Medicare card to see providers who are not in the health network. Instead, I must receive all healthcare services from in-network health providers, other than for emergency or urgently needed care. I do not need a referral to go to network doctors, specialists, and hospitals. In-network providers include podiatrists, ophthalmologists, chiropractors and all other specialists.

I am currently seeing the following Primary Care Provider and Specialist(s):
Primary Care Provider: Dr. Phil Cohen
Specialist(s):
☒ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No

By initiating below, I understand that if any of the providers listed above are not in the health network, I must see a different provider who is in the health network to receive care. If I choose to see a provider that is not in the health network, I understand that neither health nor Medicare will pay the bill. I also understand that I will no longer be able to continue to use my Medicare card to see providers that are not in the health network. I must use health providers and present my Health ID card when receiving care.

I further understand that if the Primary Care Provider listed above is not in the United Health network, I must choose a United Health participating provider as my Primary Care Provider.

New Primary Care Provider (if applicable):
*Applicant's initials: KS

I understand that I am applying for coverage in an HMO. I have reviewed, understand and agree with the content of this form.

Instant access to rich PDF image files with original handwriting

Medicare_Enrollment_Form[1].pdf - Adobe Reader

File Edit View Document Tools TerraGo Window Help

1 / 1

Enrollment APPLICATION CONFIRMATION FORM (ACF)
Medicare Plan

Name of Applicant: Ken Schneider Phone No: 206 555 1212
Address: 2127 Fifth Ave
City: Seattle State: WA Zip Code: 98103

I understand that the information captured in the accompanying Enrollment Request Form will be used to enroll me in a Health Maintenance Organization (HMO) through Health Medicare Plan.

☒ Yes ☐ No

The health marketing representative explained and I understand that when I become enrolled in an HMO, I will no longer be able to use my Medicare card to see providers who are not in the health network. Instead, I must receive all healthcare services from in-network health providers, other than for emergency or urgently needed care. I do not need a referral to go to network doctors, specialists, and hospitals. In-network providers include podiatrists, ophthalmologists, chiropractors and all other specialists.

I am currently seeing the following Primary Care Provider and Specialist(s):
Primary Care Provider: Dr. Phil Cohen
Specialist(s):
☒ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No

By initiating below, I understand that if any of the providers listed above are not in the health network, I must see a different provider who is in the health network to receive care. If I choose to see a provider that is not in the health network, I understand that neither health nor Medicare will pay the bill. I also understand that I will no longer be able to continue to use my Medicare card to see providers that are not in the health network. I must use health providers and present my Health ID card when receiving care.

I further understand that if the Primary Care Provider listed above is not in the United Health network, I must choose a United health participating provider as my Primary Care Provider.

New Primary Care Provider (if applicable):
*Applicant's initials: KS

I understand that I am applying for coverage in an HMO. I have reviewed, understand and agree with the content of this form.



Site Actions: Browse, Items, List

Show Task Pane, Show Totals, Refresh Data, Create View, Navigate Up

Current View: All Items, Current Page

View Format: Datasheet, Manage Views

Share & Track: E-mail a Link, Alert Me, RSS Feed, Sync to SharePoint Workspace, Connect to Outlook, Export to Excel

	Title	PCD	PCB	PSC	PMA	NameOfBene	MedicareClaimNo	Male/Female	HospitalDate
Libraries	10/11/2011 11:48:57 AM	☒	☐	☐	☐	Michael Hayes		M	10/11/2011
Lists	10/11/2011 3:01:07 PM	☐	☒	☐	☐			M	
Medicare Enrollment Form	10/17/2011 11:34:44 AM	☐	☐	☒	☐	Kurt Bunselmeyer	123456	F	10/17/2011
Emergency Care Form	10/17/2011 11:27:32 AM	☐	☒	☐	☐	Peter Hayes	123456	M	10/15/2011
Biometric Screening	10/11/2011 4:05:01 PM	☐	☐	☒	☐			M	10/11/2011
Enrollment Application		☐	☐	☐	☐				

How It Works

1. Simple Setup

Design Forms in Excel

- Existing or new spreadsheets



Publish & Print

- Existing or new spreadsheets



2. Flexible Data Capture

PCs, Laptops, Tablets

- Log-in to server
- Write in form or table view



Plain Paper and Digital Pens

- Print, write, send data



3. Instant, Rich Data Access

Data Aggregated on Servers

- Capturx Forms Service
- Capturx for SharePoint



Data Instantly Accessible

- Structured data & Handwriting
- User-defined Workflows
- Integration into EHR, PMS, CRM, ERP



Demonstration

Health Screening Form

First Name JASON	Last Name REID	Location AUCKLAND	Age 39
Employee ID Number 56071259		Date of Birth 20 November 1972	☒ Male ☐ Female

Your Results:

Height 69 inches	Total Cholesterol 180 mg/dL	Glucose 121 mg/dL
Weight 210 lbs.	HDL Cholesterol 65 mg/dL	
Body Fat (%) 15 %	LDL Cholesterol 92 mg/dL	Blood Pressure mmHg
BMI 19	Triglycerides 63 mg/dL	120 / 80
Waist 35 inches		

BODY FAT PERCENTAGE	
Below recommended	< 20
Recommended	20 - 29.9

CHOLESTEROL	
Desirable	< 200 mg/dL
Borderline High	200 - 239 mg/dL

Page: 1 of 1 [Fit width](#) [Text](#) [Ink](#) Form: 1 of 2 [Save](#) [Approve](#) [Previous](#) [Next](#) [Close](#)



Health Screening Form

First Name JASON	Last Name REID	Location AUCKLAND	Age 39
Employee ID Number 56071259		Date of Birth 20/11/1972	☒ Male ☐ Female

Your Results:

Height 69 inches	Total Cholesterol 180 mg/dL	Glucose 121 mg/dL
Weight 210 lbs.	HDL Cholesterol 65 mg/dL	
Body Fat (%) 15 %	LDL Cholesterol 92 mg/dL	Blood Pressure mmHg
BMI 29	Triglycerides 63 mg/dL	120 / 80
Waist 35 inches		

BODY FAT PERCENTAGE	
Below recommended	< 20
Recommended	20 - 29.9

CHOLESTEROL	
Desirable	< 200 mg/dL
Borderline High	200 - 239 mg/dL

Page: 1 of 1 [Fit width](#) [Text](#) [Ink](#) Form: 1 of 2 [Save](#) [Approve](#) [Previous](#) [Next](#) [Close](#)

Workflow

Data Capture Triggers Alert

Could be based on:

- Checkbox
- Data values
- Data collector
- Date, time, location



Instant Capturx Processing

- Data instantly sent to CFS
- Aggregated and processed



Automated, Real-Time Alerts

- Alerts via email, text messages
- Customizable subjects, messages
- Can include extracted data, image files



ATTN: New Lab Report



ATTN: New Medical Record



ATTN: Survey Complete



ATTN: New Medicare Enrollment

A screenshot of an "Enrollment Application Confirmation Form (ACF)" with handwritten information and checkboxes.

Benefits

■ Only Capturx offers:

Digital pens and tablets

- Pick the right tool for the job
- Single solution for paper and all devices
- Tablet and pen data available on SharePoint

Easy form design with Excel

- No custom coding to create & update forms
- Forms work with paper, tablets, PCs
- No new training, or proprietary apps

Uses include

- Enrollment Programs
- Biometric Screening & Corporate Wellness
- Facilities Management
- Inventory Management
- Asset Management
- Immunization & other Medical Programs

■ So Teams can:

Speed up workflows

- Instant access to healthcare, and research data
- Identify and resolve issues faster
- Make decisions faster

Lower admin and paper handling costs

- No more shipping paper
- No more data entry
- No more scanning

Reduce Compliance Risk

- No more missing documents
- No more inaccessible data

What Customers Say



“With Capturx, what had taken 10 hours, was now done in minutes. Without Capturx our process was cumbersome and fraught with data integrity issues.”

JILLIAN SUTHERLAND
Pharmacy Professional
Advisor, Northland DHB

**NORTHLAND DISTRICT
HEALTH BOARD**

*Te Poari Hauora Ā Rohe
O Te Tai Tokerau*



Northland District Health Board (DHB)

- Provides health & disability services for Northern New Zealand
- Pharmacist as auditors walk rooms & record medications from patient charts using paper forms

Pain: Data Processing for Medication Audit Forms

- Manual data entry processing takes 10 hours and introduced errors
- As data is delayed, issues go unidentified and unresolved

Solution: Capturx Forms for Excel

- Scans all the data as it's written with ink on paper
- Data directly integrated into Microsoft Excel

Results: Automates Medication Charts Audits

- Able to complete audit reporting processing in minutes
- Faster access to more accurate data and reports

Get the Case Study: www.adapx.com/dhb



Pricing

CAPTURX FOR SHAREPOINT 2010 or 2007 (CSP) [on-premise, behind the firewall]				
Product Code	Product Name and Description	List Price		
ASSV-1210-2010	Capturx for SharePoint 2010 or 2007 - Server Software o 1 Capturx for SharePoint Software CD o Annual Maintenance and Software Assurance (1 year) o Adapx Customer Support and Consulting > Consulting on installation requirements (up to 2 hours) > Server software installation (optional; up to 8 hours) > Design of 1-4 forms (up to 6 hours) > Custom web-based training with Q&A (2 hours) > Post-sale support (up to 2 hours)	\$3995.00		
Product Code	Product Name and Description	1-10 Users	11-50 Users	50+ Users
ASSV-1210-U (download SKU also available)	Capturx for SharePoint - User o 1 Capturx Pen Manager Software CD o 1 Enterprise Pen Access License o 1 Capturx Server Print Utility (download) o 1 Digital Pen Kit o 1 Shelf of Server Digital Pattern o Annual Maintenance and Software Assurance (1 yr)	\$1395.00	\$995.00	\$795.00
ASSV-1210-FD	Capturx for SharePoint - Form Design o 1 Capturx Forms for Excel Software CD o 1 Capturx Pen Manager Software CD o 1 Shelves of Desktop Digital Pattern o Annual Maintenance and Software Assurance (1 yr)	\$1595.00		
AHHM-2111	Adapx Digital Pen Kit o 1 Digital Pen o 1 Docking Station o 1 Replacement Blue Ink Cartridges (5 pack)	\$395.00		
Product Code	Product Name and Description	1-10 Users	11-50 Users	50+ Users
ASSV-2210-U-monthly	Capturx Forms Service - User-Monthly o 1 User Login - Monthly	\$79.95 per month	\$69.95 per month	\$49.95 per month



Pen Computing



Pen Computing

- **Hardware – Pen PC's, Tablets, ToughBooks**
- **Software – Windows, MyScript**



Demonstration



Benefits

- Write naturally with electronic pen
- Many people can write faster than type
- In some situations (example doing compliance inspections) you can't type
- Saves transcribing handwritten notes into typed text

Pricing

Prices for tablets range from:

- Wacom A6 tablet: \$ 200
- Wacom Intous4 large tablet: \$ 700
- Motion Computing Win7 Toughbook: \$2,200
- HP 2740p tablet notebook: \$2,900 - \$3,700
- My Script handwriting recognition: \$ 100

Keep In Mind

**Work With A Trust
Business and IT Partner like**





Thank you and Any Questions?

We would be happy to help ☺

- Presented by: Jason Reid
- Email : jason@htg.co.nz
- Phone : 07 578 1093
- Mobile : 0275 783 500