

AAHA CON 2026 · PORTLAND · SESSION 4:00-4:50

The Compliance Gap

How AI Communication Can Improve Patient Outcomes

SPEAKER

Gary Peters

SESSION

Thursday September 17 · 30 min talk + 15 min Q&A

DECK 3 OF 4

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Gary Peters

Founder & CEO, PupPilot — a communication platform for veterinary medicine with a focus in AI

VANDERBILT
UNIVERSITY

UNDERGRAD

Vanderbilt

Applied mathematics &
engineering

Carnegie Mellon University



MASTER'S • AI

Carnegie Mellon

Graduate work at NASA Ames Research Center

StartX

FOUNDER ×2

Stanford StartX

Two companies — both
acquired



FOUNDER CEO • TODAY

PupPilot

Communication Platform
(phones, texting, email, fax and
more) for veterinary medicine,
with a focus in AI

IN VETERINARY MEDICINE



College of
Veterinary Medicine



Speaker at NAVC, VIS & Cornell CVM • team
advises the AVMA on AI • research with the
University of Guelph

DISCLOSURE — I BUILD IN THE TOPIC I'M ABOUT TO DESCRIBE • EVERY FIGURE HAS A PUBLISHED SOURCE, NAMED ON THE SLIDE

The smallpox vaccine was introduced in 1796.

Why wasn't it eradicated until the 1900s?

Smallpox was eradicated in 1980. *Not with a better vaccine.*

1967 • THE INTENSIFIED PROGRAMME — MASS VACCINATION GIVES WAY TO FINDING EVERY CASE

1975 • THE RECOGNITION CARD, CARRIED HOUSE TO HOUSE AND MARKET TO MARKET

1977 • THE LAST NATURAL CASE

The last thirteen years were spent finding people, reaching them, and going to the door.



THE RECOGNITION CARD, BANGLADESH 1975 •
CDC PHIL

What the *delivery* was worth

\$300M

the cost of the eradication programme

> \$1B

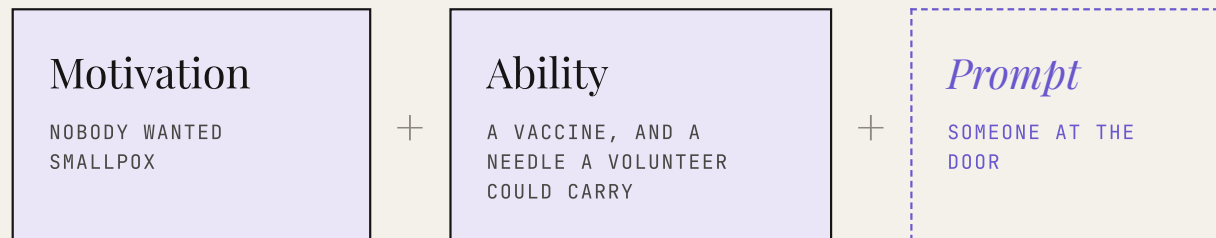
saved, every year since 1980

CONCLUSION

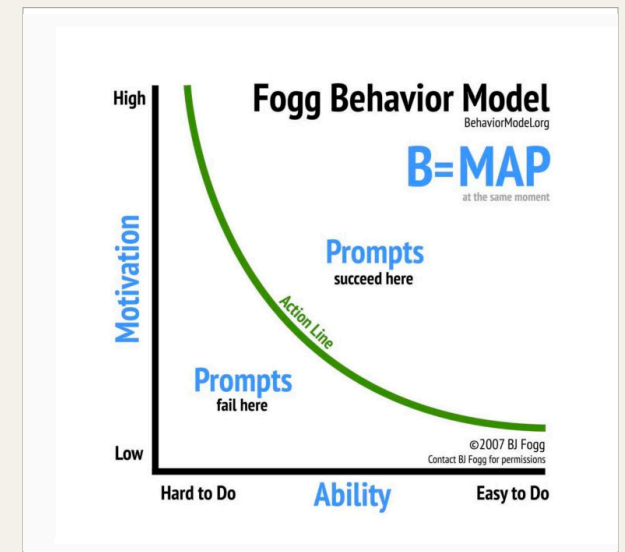
The delivery was worth *more than the medicine*.

SOURCE — WHO, COMMEMORATING SMALLPOX ERADICATION (2020) • INSTITUTE OF MEDICINE (2002)

Why reaching people worked: *Behavior = Motivation + Ability + Prompt*



All three must occur at the same moment, or the behavior does not happen.



© 2007 BJ FOGG • BEHAVIORMODEL.ORG

CONCLUSION

The vaccine was the ability. *The campaign supplied the prompt.*

SOURCE — FOGG, PERSUASIVE '09, ACM • STANFORD BEHAVIOR DESIGN LAB

50%

of people prescribed a long-term medication don't take it as prescribed — in developed countries, by the WHO's own estimate.

WORLD HEALTH ORGANIZATION • 2003 • "A MASSIVE WORLDWIDE PROBLEM"

SOURCE — WHO, ADHERENCE TO LONG-TERM THERAPIES: EVIDENCE FOR ACTION (2003)

“Drugs don't work in patients who don't take them.”

C. EVERETT KOOP • SURGEON GENERAL OF THE UNITED STATES

“Improving adherence may well result in better health outcomes than making available new [advances in medicine].”

WORLD HEALTH ORGANIZATION, 2003



OFFICIAL PORTRAIT • PUBLIC DOMAIN, US FEDERAL

SOURCE — KOOP, AS CITED IN OSTERBERG & BLASCHKE, NEW ENGLAND JOURNAL OF MEDICINE 2005 • WHO 2003

And the prompt is the *best-tested* part of the medicine.

2.1×

the odds of taking medication, with text-message reminders — 16 randomized trials; adherence from a 50% baseline to 68%

1.9×

the odds, with automated reminders for cardio-metabolic medication — 17 trials, 25,101 patients

+28%

immunization rates with reminder and recall, across 75 studies in ten countries

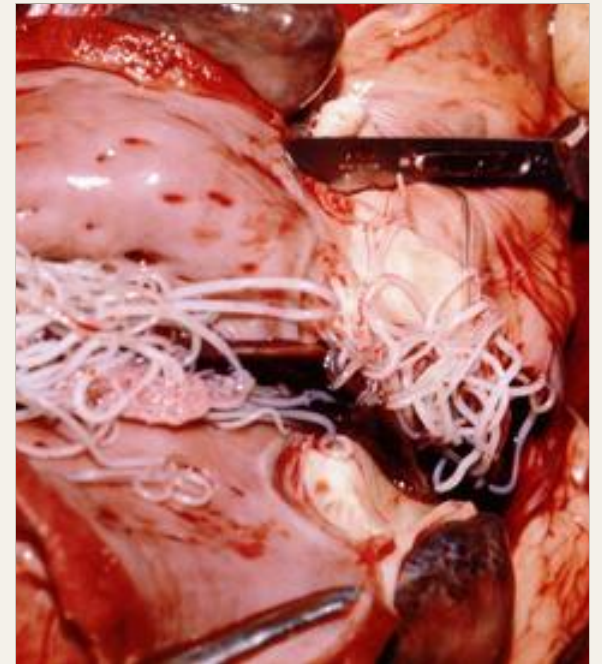
CONCLUSION

The reminder *is* the treatment.

SOURCE — THAKKAR ET AL., JAMA INTERNAL MEDICINE 2016 (OR 2.11, 16 RCTS, N=2,742) · KASSAVOU & SUTTON, HEALTH PSYCHOLOGY REVIEW 2018 (OR 1.89, 17 RCTS, N=25,101) · COCHRANE CD003941 (2018), RR 1.28, 55 STUDIES / 138,625 PARTICIPANTS

Veterinary medicine has the same problem. *And the cleanest case of it.*

A ONCE-A-MONTH PILL THAT PREVENTS HEARTWORM • SINCE 1987
"ALMOST 100 PERCENT PREVENTABLE" — AMERICAN HEARTWORM SOCIETY
CASES ARE NOT GOING DOWN



ADULT D. IMMITIS, NECROPSY • CC BY-SA 3.0

SOURCE — NOACK ET AL., IJP: DRUGS AND DRUG RESISTANCE 2021 (IVERMECTIN, 1987) • AMERICAN HEARTWORM SOCIETY, 2022
INCIDENCE SURVEY

Thirty-nine years later, the numbers *haven't moved*

2/3

of dogs are on no preventive at all

7.3

of the twelve doses is what the average
buyer takes home — only one in three buys
the full year

1.1M+

dogs test positive every year, a number that
hasn't budged in a decade

SOURCE — AMERICAN HEARTWORM SOCIETY INCIDENCE SURVEYS 2001-2025 • CAPC TEST DATA 2013-2022 • IDEXX (~50M TESTS, 2013-2019) • MWACALIMBA ET AL., PARASITES & VECTORS 2023 (3.5M DOGS) • LAVAN 2018 (202K DOGS) • VETSTREET 2013-16 • MWACALIMBA ET AL., PLOS ONE 2022 (4,615 PRACTICES)

Prevention is *well worth the cost*

\$182.90

annual cost to prevent

\$1,457

cost to treat

Dogs treated for heartworm disease up to nine years of age had significantly higher mortality risk than dogs in the prevention group.

SOURCE — MWACALIMBA ET AL., PARASITES & VECTORS 2026 • N=235,188 PREVENTION / 2,425 TREATMENT • VETSOURCE (LAPSED BENCHMARK 2017/2024; VISIT TRENDS 2024-25, 6,500+ PRACTICES)

This was never a *medicine* problem.

AAHA's own compliance study found the biggest barrier was the practice itself — recommendations not made, follow-through not done. Cost was rarely the reason.

THE PROFESSION'S OWN NUMBERS

44%

of practices send only one appointment reminder, regardless of whether it worked

66%

don't attempt to recall patients not seen in 24 months

SOURCE — AAHA, THE PATH TO HIGH-QUALITY CARE (2003), VIA DVM360 • COVETRUS NORTH AMERICAN VETERINARY INDUSTRY MARKETING RESEARCH SURVEY, N=407 PRACTICES

The diagnosis is made in the clinic. The medicine happens in the *follow-through*.

Whether the dose is given, the recheck booked, the refill picked up — that's decided at home, in the eleven months and twenty-nine days a year the clinic isn't there.

CONCLUSION

Follow-through isn't what happens after the medicine. It *is* the medicine — and it has to become part of the practice.

Every other industry already *sends notifications*.

THE PHARMACY • "YOUR PRESCRIPTION IS READY"

THE AIRLINE • "YOU'VE BEEN REBOOKED"

THE DELIVERY • A PHOTO OF THE BOX ON YOUR STEP

Clients aren't demanding more. They're expecting what everyone else already does.



CHUTTERSAP • UNSPLASH

Automated reminders are already *everywhere.*

So why not in veterinary medicine?

SCHEDULING

"Your appointment is Thursday at 3 —
reply C to confirm."

MONTHLY MEDICATION

"Time for this month's dose" — and the
refill, before it runs out.

COME BACK WHEN IT MATTERS

The recheck after the procedure, the
follow-up the visit called for.

Hotels, airlines, insurers, dentists, pharmacies — every industry that books, refills or follows up runs these.

SOURCE — DVM360, JUNE 2002 (VETINSITE PET PORTALS, CLIENT REMINDERS) • VCA / VETSTREET, JULY 2011 (SEC FORM 8-K: 4,500 PRACTICES, AUTOMATED REMINDER CARDS) • INSTINCT SCIENCE, STATE OF GP CARE 2026 (N=763)

Why it isn't happening

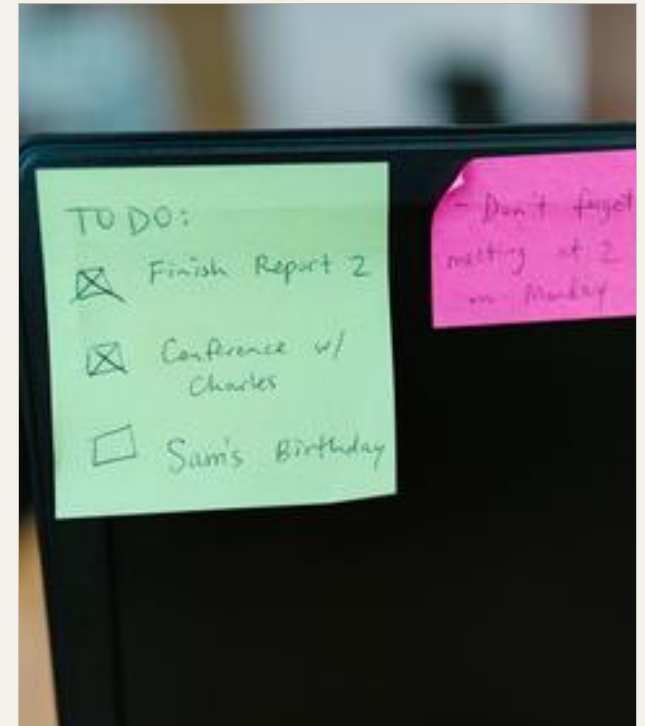
It's 5:40. The phones have finally stopped. *And there's a list.*

Post-op check on the Labrador from Tuesday

Three heartworm tests overdue

The senior panel we recommended in March

Call back the woman who left a message at 2



RDNE STOCK PROJECT • PEXELS

Now here's the same clinic's *inbound* week

ONE WEEKDAY • ~160 INBOUND CALLS

~105 ANSWERED BY A PERSON

~55 MISSED

~280

missed calls by the end of the week

35%

of all inbound calls that week went unanswered

SOURCE — PUPPILOT DATA • ONE MULTI-DOCTOR GENERAL PRACTICE, 5 WEEKDAYS

A practice that can't return the calls that *came in* is never going to start making the ones that *didn't*.

And even with the time, *the client list didn't exist.*

Almost every practice has software that technically could do reminders... but most still don't have it set up for their client list — why?

Why the list never existed

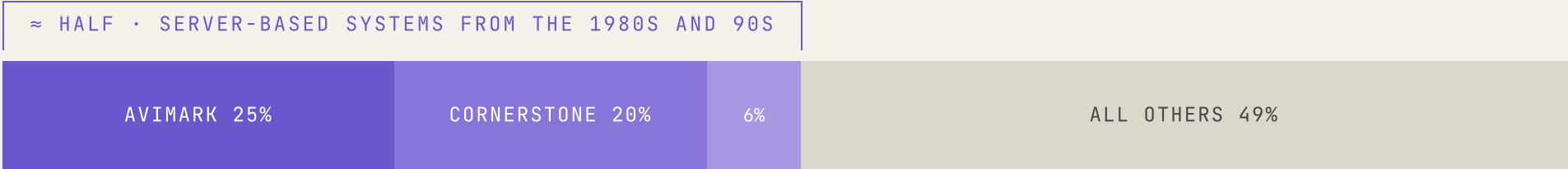
Medical record software was never designed for medicine. It was designed for *billing*.

“For most dogs and cats, their records, in general, are stored as free text as most systems are mainly designed for efficient charging and processing of transactions throughout a patient visit.”

ASSOCIATION FOR VETERINARY INFORMATICS • CTSA ONE HEALTH ALLIANCE • JAMIA OPEN, 2020

Most systems don't integrate — *especially the old ones.*

85% of practices report their PIMS does not integrate well with the software they use.



AVIMARK

Written 1988–89, for DOS.

CORNERSTONE

In thousands of hospitals by 1997 — still "on-premises" today.

IMPROMED

First product, 1979.

"INTEGRATION REQUESTS ARE PAUSED." — COVETRUS SOFTWARE PAGE SEPT 2026

CONCLUSION

Half the profession's records sit in software not one generation old, but *two or three.*

SOURCE — IDEXX, FINDING THE TIME (2023, N=786) • KYNETEC, VIA 2026 COMPANION ANIMAL VETERINARY SOFTWARE GUIDE (AYERS ET AL.; IMPROMED SHARE PENDING CONFIRMATION) • MCALLISTER SOFTWARE SYSTEMS HISTORY • IDEXX ANNUAL REPORT 2025 • HENRY SCHEIN, 2011 (IMPROMED, 1979) • COVETRUS & IDEXX SYSTEM REQUIREMENTS • COVETRUS SOFTWARE-PARTNER PAGE, SEPT 2026

So the only reminder it can send is the one *the invoice can trigger*.

“A patient's letter reminders populate and update accordingly when the patient is invoiced for items with linked letter reminders to generate and satisfy.”

IDEXX CORNERSTONE HELP HUB

SIX DOSES SOLD IN MARCH → A CARD IN SEPTEMBER

SOURCE — IDEXX CORNERSTONE HELP HUB, "SETTING UP AND MAINTAINING A PATIENT'S REMINDERS"

What the invoice knows. *What the chart knows.*

WHAT THE INVOICE KNOWS

RABIES VACCINE

HEARTWORM PREVENTIVE × 6

EXAM

CBC / CHEMISTRY

WHAT THE CHART KNOWS

“Owner declined heartworm test — revisit next visit.”

“Recheck ears in two weeks.”

“Grade II murmur. Echo recommended; owner will think about it.”

“Started gabapentin — refill in 30 days.”

CONCLUSION

Every line on the right is *a call that never got scheduled.*

And around the record, *a wall*.

85%

of practices say their software doesn't integrate well with their practice-management system

days

between batch refreshes in leading on-premise system's partner API

“Closed proprietary ecosystems have become the norm in our industry.”

CALEB FRANKEL, VMD • FOUNDER & CEO, INSTINCT SCIENCE • 2026

CONCLUSION

Never built to read the medicine. *Never built to let anyone else in.*

SOURCE — IDEXX, FINDING THE TIME (2023, N=786) • IDEXX DATA SERVICES, CORNERSTONE API DOCUMENTATION • FRANKEL, TODAY'S VETERINARY BUSINESS, 1 AUGUST 2026

Human medicine was *forced* to do it.

HUMAN MEDICINE

2014

patient reminders become a federal requirement for incentive money

95%

of office-based physicians on an electronic record, from 42% in 2008

VETERINARY MEDICINE

30%

of practices sending any reminder to refill a medication

0

requirements, incentives or standards for any of it

CONCLUSION

No mandate, no standard — *and a record that couldn't have supported one.*

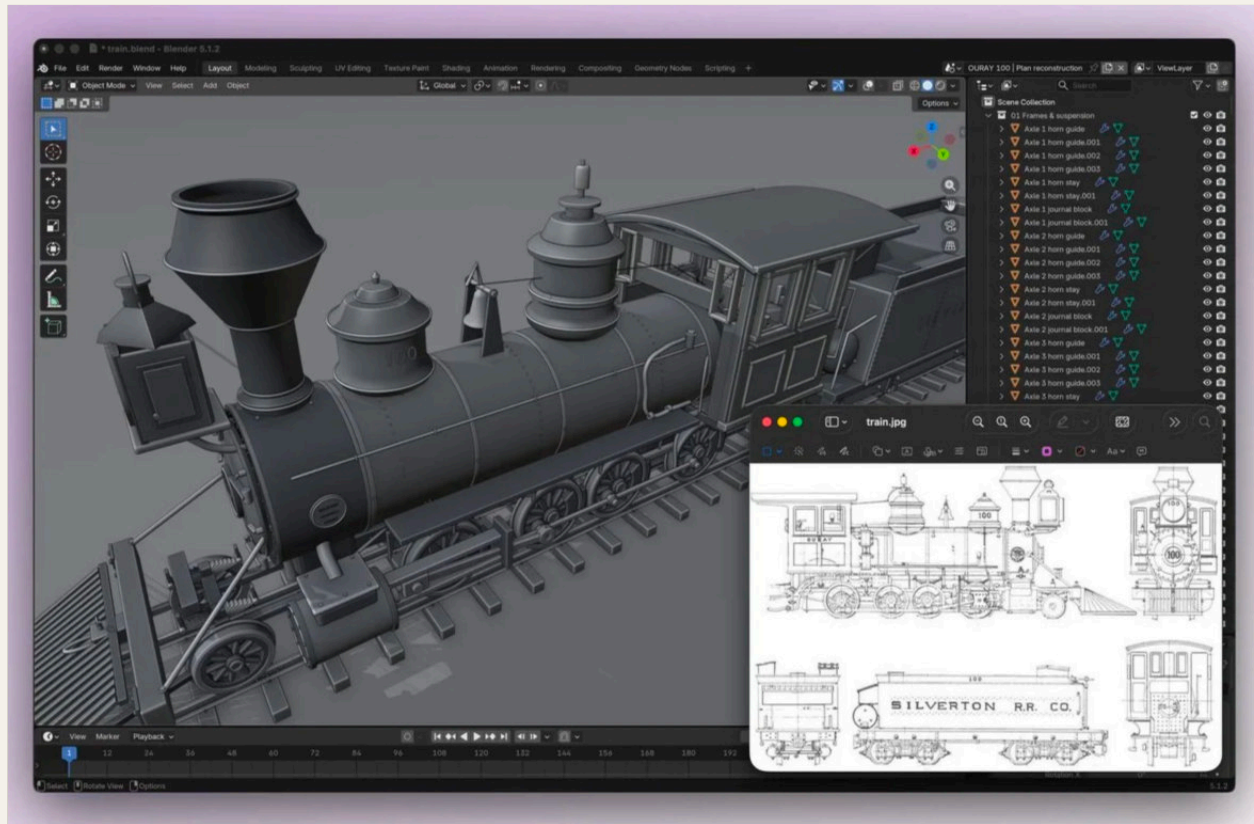
SOURCE — CMS, MEANINGFUL USE STAGE 2 CORE MEASURES (2012) • ONC / NEHRS, EHR ADOPTION 2008-2024 • AAHA COMPLIANCE STUDY 2009

The compliance gap was never a discipline problem. It's an *infrastructure* problem.

The list lived in a billing system nobody could read — not the practice, not the tools, not anyone outside.

What changed

AI can now *operate software built for people.*



CHATGPT 6 ASTRA · HANDED A PHOTO OF A TRAIN, IT REBUILDS IT IN BLENDER — PLAN DRAWINGS AND ALL · OPENAI

If it can operate Blender, it can operate *the record*.

The same systems can drive the practice-management software itself — get the data out, and make it interoperable with everything else. And on reading the chart, the published numbers:

97%

sensitivity of a language model pulling clinical facts out of free-text veterinary notes, against human review

100%

recall extracting a measured value from 4,415 real practice narratives — 73% for the old pattern-matching approach

CONCLUSION

The list can finally be built *from the chart, not the invoice*.

SOURCE — WULCAN ET AL., FRONTIERS IN VETERINARY SCIENCE 2024 (N=250 RECORDS) · FINS ET AL., VETERINARY RECORD 2024 (SAVSNET, N=4,415) · PETBERT, SCIENTIFIC REPORTS 2023 (5.1M RECORDS)

And it isn't the PIMS doing the *reading*.

31%

of practices adopted or changed an AI medical-record tool in the past year

11%

adopted or changed a cloud PIMS

2%

adopted or changed an on-premise PIMS

A few systems of record are opening their doors. For everyone else, the reading is being done from outside.

CONCLUSION

The change isn't coming from the systems that hold the data. *It's coming from the ones that can read it.*

SOURCE — INSTINCT SCIENCE, THE STATE OF GENERAL PRACTICE VETERINARY CARE, 2026 EDITION (N=763)

The list finally *exists*.



↩ THE REPLY, ROUTED

THE OLD PATH: INVOICE ITEM → LETTER

CONCLUSION

Not AI that talks. *AI that reads — and then reaches.*

The medicine was never the
bottleneck. *Reaching people was.*

And for the first time, reaching them can be part of the practice.
